

PgMP® Exam Test Preparation

*Test Questions, Practice Tests,
and Simulated Exams*



Ginger Levin, PMP, PgMP

CRC Press
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AN AUERBACH BOOK

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Dr. Ginger Levin, PMP, PgMP



CRC Press

Taylor & Francis Group

Boca Raton London New York

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CRC Press
Taylor & Francis Group
6000 Broken Sound Parkway NW, Suite 300
Boca Raton, FL 33487-2742

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Printed on acid-free paper

International Standard Book Number-13: 978-1-138-57979-8 (Paperback)

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Preface

Based on our experience in helping people to prepare for the PgMP® Exam, we know that you will have questions, such as “What topics are covered on the exam?” and “What are the questions like?” Not surprisingly, some of the most sought-after study aids are flashcards and practice tests, which are helpful in two ways.

(1) using flashcards and taking practice tests increase your knowledge of the kinds of questions, phrases, terminology, and sentence construction that you will encounter on the real exam; and (2) taking practice tests provides an opportunity for highly concentrated study by exposing you to a breadth of program management content generally not found in a single reference source.*

We developed this specialty publication with one simple goal in mind—that is, to help you study for and pass the PgMP® certification exam. Because the Project Management Institute (PMI®) does not sell past exams for prospective certification purposes, the best option is to develop practice test questions that are as representative as possible. And that is exactly what we have done.

This guide contains 20 practice multiple-choice questions for each of the five domains covered in the PgMP® exam according to the *Program Management Professional (PgMP®) Examination Content Outline (April 2011)*. For the Program Life Cycle domain, we have prepared 20 questions for each of the five phases in the life cycle. We have also included two 170-question representative practice tests that are on line and in the book.

For each question, we have included a rationale and a reference. References are provided at the end of the book.

Earning the PgMP® certification is a prestigious accomplishment, but studying for it should not be difficult if you use the tools available.

Good luck on the exam!

Dr. Ginger Levin, PMP, PgMP
Lighthouse Point, Florida

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Acknowledgments

I want to acknowledge the efforts of our publisher, CRC Press, and especially that of Richard O'Hanley, Randy Burling, Stephanie Place-Retzlaff, and the entire CRC team who worked tirelessly to publish this book so it would be available according to the release of the new PgMP® exam from PMI®.



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Online Practice Test

To access this practice test, please contact pgmp4edprep@ittoday.info. The on-line test lasts four hours and has a clock that ticks down to show you how much time you have left in the four hours for the exam. Once you have answered all the questions or time runs out, you will be scored by domain and also through a proprietary scoring algorithm that assesses your strengths and weaknesses to identify the areas where you require further study.



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About the Author

Dr. Ginger Levin is an author, senior consultant, and educator in portfolio, program and project management with more than 50 years' experience in the public and private sectors. Her specialty areas include program management, business development, portfolio management, metrics, organizational change, knowledge management, and the project management office. She is active in providing training to others as they study for their PgMPs®. She is an Adjunct Professor for the University of Wisconsin-Platteville in its master's degree program in project management. Before her consulting and teaching career, she was President of GLH, Incorporated, a woman-owned small business in the Washington, DC area for 15 years, specializing in project management. Earlier, she had a career in the U.S. Government, working for six agencies in positions of increasing responsibility for 14 years. Dr. Levin is the author, co-author, or editor of more than 20 books in the project profession.

Dr. Levin is a member of and active volunteer for the Project Management Institute (PMI®) and a frequent speaker at PMI® Congresses, Chapters, and on projectmanagement.com. In 2014, she was the proud recipient of PMI's Eric Jennett Award.

She is certified by PMI® as a Project Management Professional (PMP®), and a Program Management Professional (PgMP®), and she was the second person in the world to earn the PgMP® designation.

Dr. Levin holds a Doctorate in Public Administration from The George Washington University, where she also received the Outstanding Dissertation Award from the School of Government and Business Administration. She also holds a Master of Science in business administration degree from The George Washington University and a Bachelor of Business Administration degree from Wake Forest University.



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List of Acronyms

AC	actual cost
ANCI	Annual net cash inflows
BAC	budget at completion
CEO	chief executive officer
CFO	chief financial officer
CIO	chief information officer
CMMI	Capability maturity model integration
COO	Chief Operating Officer
CPI	cost performance index
CV	cost variance
EPMO	enterprise program management office
ETC	estimate to complete
EV	earned value
FDA	Food and Drug Administration
HR	Human Resources
IP	intellectual property
IRR	internal rate of return
ISO	International Organization for Standardization
IT	information technology
KPI	key performance indicator
M&A	mergers and acquisitions
NPV	net present value
OBS	organizational breakdown structure
PDA	Personal Digital Assistant
PgMP®	Program Management Professional
PMI®	Project Management Institute
PMIS	program management information system
PMO	program management office
PMP®	Project Management Professional
PPM	project and portfolio management
PV	planned value
PWBS	program work breakdown structure
RFI	Request for Information

RFP	Request for Proposal
RFQ	Request for Quotation
ROI	return on investment
SME	subject matter expert
SPI	schedule performance index
SV	schedule variance
SWOT	strengths-weaknesses-opportunities-threats
WBS	work breakdown structure

Introduction

The PgMP® Exam Test Preparation - Test Questions, Practice Tests, and Simulated Exams includes five sections of multiple-choice questions. These five sections are the five domains described in the *Program Management Professional (PgMP®) Examination Content Outline* (April 2011). These domains correspond to those in *The Standard for Program Management*—Fourth Edition (2017).

Each question includes a rationale for each correct answer, and a bibliographic reference for further study if needed. The Program Management domain is broken into five sections corresponding to the five phases in the program life cycle as described in the *Examination Content Outline*.

We have also included two complete practice tests, each consisting of 170 questions*, that follow the blueprint of the real PgMP® exam as described in the *Examination Content Outline*. For example:

- 15 percent of the questions relate to program strategy alignment
- 44 percent relate to the program life cycle as subdivided as follows:
 - 6% of the questions involve initiating or program formulation
 - 11% of the questions involve planning or program planning
 - 14% of the questions involve executing or program delivery
 - 10% of the questions involve controlling or program performance
 - monitoring and controlling
 - 3% of the questions involve closing or program closeout
- 11 percent relate to program benefits management
- 16 percent relate to program stakeholder engagement
- 14 percent relate to program governance

To use this study guide effectively, work on one section at a time. It does not matter which section you choose first, but we recommend that you answer the questions in the order presented, because this order reflects the *Examination*

* Of the 170 questions on the real PgMP® certification exam, 20 are pretest questions and do not count for scoring purposes. When taking the real exam, you will not know which 20 are the unscored pretest questions, so you will need to answer each question as if it were one of the 150 to be scored. For the practice test in this publication, we provide all 170 questions as if they were real questions; there are no pretest questions in our practice exams, and the blueprint is applied to all 170 questions.

Content Outline. The rationales provided should clarify any misconceptions. For further study and clarification, consult the bibliographic reference.

After you have finished answering the questions that follow each section, it is time to take the practice tests. We have developed different questions for each practice test. First, take the tests on line and then take them in the book. Note your answers on the sheets provided, compare your answers to the answer key, and use your results to determine what areas you need to study further*.

To make the most of this specialty publication, use it regularly.

To further enhance your study, the two practice tests are available on-line at <http://www.ittoday.info/pgmp/examhome.html>. The web-based version of these exams includes a clock, so you can see how well you do in the allotted four hours for the exam. One approach to consider is to take one of the web-based exams after you go through the book with the test questions by domain and see how you do. Then see your weak areas and do some additional studying. Follow it and see your progress by taking the first exam in the book so you can see the rationale for each answer. Study some more and then try the second exam.

Either in this book or on the web, the practice tests are an essential study tool created with one goal in mind: helping you to pass your exam and become PgMP® certified.

* PMI® grades the PgMP® exam by assigning each question a degree-of-difficulty factor (which is not known to you) and a certain number of points that will be awarded if it is answered correctly. When you answer a question correctly, the value of that correct answer may, and probably will, be different from the value of other questions because of this “factor.” We have a degree-of-difficulty for the questions in our practice tests based on our own proprietary algorithm. We believe that if you can correctly answer at least 80 percent of the questions on these practice tests, then you should be prepared to be successful on the real PgMP® Certification Exam.

Program Strategy Alignment

Practice Questions

INSTRUCTIONS: Note the most suitable answer for each multiple-choice question in the appropriate space on the answer sheet.

1. Assume you are working on an innovative program to develop a series of robotic cars to accommodate a variety of requirements. However, you realized another program should be developed to develop solar-powered cars. You discussed this idea with your sponsor and some peers and decided to develop a business case for this new program. You realized it would be a high-risk program, so you decided to prepare a risk management strategy. Your first step is to—
 - a. Link risks to organizational strategic objectives
 - b. Review the program roadmap
 - c. Identify risks to strategy alignment
 - d. Consider the program charter
2. While programs are part of a portfolio, there are distinctions between them. However, there are two key differences, one of which is—
 - a. Time
 - b. Stakeholder expectations
 - c. Risk tolerances
 - d. Escalated issues

3. Assume you have performed an initial risk assessment for your new program to transform your company into one that does not work in silos. Many stakeholders are negative to your idea for this program as they enjoy their role in silos, and no one really likes change. You realize you need stakeholder support as you prepare your proposed business case and throughout the program. When you do your program risk response strategy, first you should realize you need to—
 - a. Determine the potential responses
 - b. Combine risk thresholds with the initial risk assessment
 - c. Prepare your program risk management plan
 - d. Ensure the program's objectives support the strategy
4. Assume you are working for an organization, ABC, which has about 500 people in it. Recently, your executives attended a one-day training program that presented an overview of portfolio, program, and project management. When the CEO, CFO, and CIO returned from this session, you were tasked to provide a list of all the projects under way in the organization for their review. When you reviewed all the projects before giving the list to the executive team, you recommended to them that some of the multiple projects under way be managed as a program. This is because—
 - a. Deliverables are independent
 - b. A collective capability is delivered
 - c. Resource constraints affect projects
 - d. Greater benefits would result
5. You met with the members of the Executive team in your company ABC. They were impressed with your knowledge of program management, and since they had attended the one-day seminar, they told you they wanted to make sure every program they set up supported the organization's strategic goals because—
 - a. The organization's strategy is a result of its strategic planning
 - b. The organization's strategy affects how its vision will be achieved
 - c. Different clients, suppliers, and technologies are included in each program
 - d. Outputs and outcomes are expected to support strategy
6. Typically risk management occurs when the program is in the planning stage, but it should occur earlier as the program is initiated because—
 - a. It provides a risk mindset for program stakeholders from the beginning
 - b. It supports program governance
 - c. It provides the approach to monitor risks
 - d. It focuses on successful delivery of the roadmap aligned with organizational strategy

7. You are the program manager for the new 6-D screen development program. You were thrilled to be selected as this is a high priority program for the company. However, you cannot do so until you—
 - a. Create a schedule and identify risks
 - b. Define the expected benefits in the business case
 - c. Prepare a business case
 - d. Identify the key stakeholders and determine their level of influence
8. As the program sponsor for this new program on the 6-D screen development to replace all existing 3-D screens and enhance quality, you worked to obtain approval for this program and decided to contribute to the body of knowledge available to the decision makers so you—
 - a. Held a focus groups
 - b. Consulted with experts for suggestions based on work on previous programs
 - c. Conducted a customer acceptance review
 - d. Prepared a feasibility study
9. You are preparing the business case to obtain organizational leadership approval for a new program to implement a company-wide customer relationship management system to better manage sales activities and leads. You want to reduce the silo-based approach in which business development operates. You have been meeting with many people as you work to prepare this business case, and already you have heard more than 600 salespeople in your company object to it since they enjoy working in a silo. Your business case therefore should clearly address—
 - a. The technical feasibility of the program
 - b. Program outcomes
 - c. Social needs
 - d. Program scope

10. You want to determine an acceptable variation among an objective of your program to reduce hazardous waste in your country. While you have stakeholders who are positive proponents, no one wants a landfill in his or her backyard, so you have an objective to set up the landfill, so no one is affected by it through new technology. You are determining a risk threshold and have four options—
 - a. Point out to your executives that even though the technology is new, the risk exposure is minimal as it enables the company to enter new markets, so the risk should be accepted
 - b. A risk mitigation strategy should be prepared with a contingency since it is a new technology that will be used
 - c. You need to focus on a low level of qualitative analysis - probability/impact - and put this risk in the risk register with some triggers
 - d. You need to work collaboratively with your sponsor to determine the minimum level of risk exposure
11. You are a member of your organization's Product Portfolio Committee. The head of your enterprise program management office recommends that a program be undertaken to develop a series of products for the next-generation automobile to be run using helium. An important consideration of your committee is—
 - a. Sustainability
 - b. Regulatory issues
 - c. Market analysis
 - d. Key resources
12. You are a functional manager in your organization, the head of the Department of Engineering, and a member of the Selection Committee for new programs. At the committee meetings, you review potential programs. One key factor that you consider as to whether to approve a program is—
 - a. Who will be the program manager?
 - b. What is the funding environment?
 - c. What is the source of program funding?
 - d. What are the next steps to get the program started?
13. You are striving to determine the risk appetite in your program to enable your stakeholders to have a common understanding. Your goal in doing so is to—
 - a. Determine the organization's willingness to accept and deal with risks
 - b. Determine the program's risk management strategy
 - c. Proceed to performing a program risk assessment
 - d. Ensure resources are in sync with capacity and capacity

14. Assume you are a member of your agency's Program Selection Committee, and the Committee has just met to determine which programs and projects it should pursue. Your program to develop the next generation Air Force radar system was approved, and you are the program manager. You realized the necessity of conducting a SWOT analysis. Its analysis then—
- Focuses on factors outside of the program
 - Assists in benefits identification
 - Helps to develop the program charter
 - Helps establish meaningful measures to assess program performance
15. You are a member of your insurance company's Program Selection Committee. You are considering several programs to pursue. Each has identified benefits that support your company's overall strategic plan, but you need to select the one with the shortest payback period. Program A is estimated to cost \$100,000 to implement and has annual net cash inflows of \$25,000; Program B is estimated to cost \$75,000 with inflows of \$20,000; Program C is estimated to cost \$225,000 with inflows of \$80,000; and Program D is estimated to cost \$275,000 with inflows of \$90,000. You recommend that your company select—

<i>Program A NPV at</i>	<i>Program B NPV at</i>	<i>Program C NPV at</i>	<i>Program D NPV at</i>
5% = \$2,399	5% = \$2,105	5% = \$6,400	5% = \$4,065
10% = \$3,112	10% = \$1,254	10% = \$3,275	10% = \$1,852
15% = \$1,402	15% = \$1,001	15% = \$1,679	15% = \$925

NPV = Net Present Value

- Program A
 - Program B
 - Program C
 - Program D
16. You are trying to determine the best possible risk response strategy for a program risk to your product to produce dirigibles that will be safe and can fly quickly to anyplace in the world. Your risk threshold is five percent over budget, and the risk rating is it is a significant risk since it is using new technologies. You should—
- Accept the risk
 - Exploit the risk
 - Have a fallback plan
 - Transfer the risk

17. You are a member of your manufacturing company's Program Selection Committee. You are considering four possible programs to pursue. Each one has identified benefits that support your company's overall strategic plan. Data are available on four possible programs, but you can select only one because of resource limitations.

<i>Program A IRR</i>	<i>Program B IRR</i>	<i>Program C IRR</i>	<i>Program D IRR</i>
42%	40%	36%	33%

IRR = Internal Rate of Return

- Based on this information, you recommend that your company select—
- a. Program A
 - b. Program B
 - c. Program C
 - d. Program D
18. At last, your program steering committee authorized your program by means of a program charter. It Is derived from—
- a. Strategic goals and objectives
 - b. Available funding
 - c. The program roadmap
 - d. The program business case
19. Resources are totally scarce in your organization as six months ago, there was a 30% reduction-in-force, and others have left feeling there could be another one. Funding also is limited. Even though organizational leaders have stated there will be no further cuts, people remain skeptical. This means as a program manager you need—
- a. Commitment from functional managers that they will provide resources to you
 - b. An explicit program charter
 - c. The support of the Chief Financial Officer to your program to ensure funds are available when needed
 - d. A financial framework and management plan

20. Although your program for the next generation social media site in which it will be totally impossible to hack has been approved, today, Tuesday, your executive team asked you to provide for its meeting on Friday information about your program's intended direction. All the C-Level executives will be there. You decide to—
- a. Provide a dashboard
 - b. Present a master schedule
 - c. Prepare a roadmap
 - d. Present a high-level program plan



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Answer Sheet

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
6.	a	b	c	d
7.	a	b	c	d
8.	a	b	c	d
9.	a	b	c	d
10.	a	b	c	d

11.	a	b	c	d
12.	a	b	c	d
13.	a	b	c	d
14.	a	b	c	d
15.	a	b	c	d
16.	a	b	c	d
17.	a	b	c	d
18.	a	b	c	d
19.	a	b	c	d
20.	a	b	c	d



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Answer Key

1. c. Identify risks to strategy alignment

Although risk management is ongoing, the initial risk assessment offers a unique opportunity to determine the program's risks to the organization's objectives. As noted in the question, the risk threshold is high making it even more important to do this initial risk assessment.

PMI®, *The Standard for Program Management*, 2017, 42

2. a. Time

Time is a key distinction as programs have a clearly defined beginning, an end point, and outcomes and planned benefits to be achieved. Schedules are incorporated to measure achieving milestones. The other key distinction is relatedness.

PMI®, *The Standard for Program Management*, 2017, 27

3. b. Combine risk thresholds with the initial risk assessment

The purpose in doing so is to plan how the risks will be managed effectively and consistently. When determining the strategy, then you will end up with a risk management strategy for each identified risk to determine the risk thresholds.

PMI®, *The Standard for Program Management*, 2017, 42

4. d. Greater benefits would result

The purpose of managing projects, subprograms or subsidiary programs, and program activities as a program is to realize more benefits than if they were managed individually.

PMI®, *The Standard for Program Management*, 2017, 3

5. d. Outputs and outcomes are expected to support strategy

Organizations initiate programs to deliver benefits and accomplish agreed-upon outputs and outcomes that affect strategy and provide value.

PMI®, *The Standard for Program Management*, 2017, 9

6. d. It focuses on successful delivery of the roadmap aligned with organizational strategy

Risk management permeates program management. To deliver a successful program a defined risk strategy is needed as it does focus on the roadmap, alignment to strategy, and the environmental assessments. In the early stages the strategy drives the later risk management activities.

PMI®, *The Standard for Program Management*, 2017, 41

7. c. Prepare a business case

Before a program can be chartered, the program manager prepares a business case, collaborating with key sponsors and stakeholders. The business case assesses the program's investment against its intended benefits.

PMI®, *The Standard for Program Management*, 2017, 35

8. d. Prepared a feasibility study

The feasibility study builds on the business case, organizational goals, and other existing initiatives to assess the organization's finance, sourcing, complexity, and constraint profile; therefore, it contributes to the information available to decision makers in program selection to approve or deny the business case.

PMI®, *The Standard for Program Management*, 2017, 40

9. b. Program outcomes

This scenario is an example of an internal program. The business case contains several items, one of which is program outcomes, which are needed in this situation to obtain approval for it and to justify the needed resources for the program. Social needs are in business cases for some programs, but they do not apply to this situation.

PMI®, *The Standard for Program Management*, 2017, 35

10. b. A risk mitigation strategy should be prepared with a contingency since it is a new technology that will be used

There are several types of risk thresholds that include the minimal level of risk exposure, qualitative and quantitative analysis, and the maximum level of risk to be managed. In this situation, the technology is new, and the organization's risk appetite is not known. Having a mitigation strategy in place then is the way to show organizational leaders how you plan to handle the risk should it occur.

PMI®, *The Standard for Program Management*, 2017, 41–42

11. b. Regulatory issues

In considering whether to select or approve a program, in this situation, regulatory approval would be required; therefore, the objectives must be evaluated relative to regulatory and legal constraints. Regulatory issues are an enterprise environmental factor that may influence program selection, design, funding, and organization.

PMI®, *The Standard for Program Management*, 2017, 38

12. b. What is the funding environment?

Enterprise environmental factors influence the selection decision whether they are internal to the program or are outside of the program; the funding environment is a key example.

PMI®, *The Standard for Program Management*, 2017, 38

13. a. Determine the organization's willingness to accept and deal with risks

Knowing the organization's risk appetite is essential to facilitate strategy alignment with the program's risk threshold.

PMI®, *The Standard for Program Management*, 2017, 41

14. c. Helps to develop the program charter

SWOT analysis is a type of environmental analysis that can be conducted. It provides information useful in developing the program charter and optimizing the program management plan. It also may form part of the business case and/or the feasibility study.

PMI®, *The Standard for Program Management*, 2017, 40

15. c. Program C

In using net present value (NPV) as a selection criterion, a dollar one year from now is worth less than a dollar today. The more the future is discounted (higher discount rate), the less the NPV of the program. If the NPV is high, then the program is rated high. In this situation, you would select Program C. The funding environment is an enterprise environmental factor that involves areas outside of the program manager's control specially since strategic goals often change.

PMI®, *The Standard for Program Management*, 2017, 38

Milosevic, Dragan Z. 2003. *Project Management ToolBox: Tools and Techniques for the Practicing Project Manager*. Hoboken, NJ: John Wiley & Sons, Inc., 42–44

16. d. Transfer the risk

In this situation since it is a new product using unproven technologies, it is likely to use numerous contractors and subcontractors. While there are several risk response strategies, the best one is to transfer the risk to a contractor with penalties then included in the contractor's contract should the contractor be unable to manage the risk successfully.

PMI®, *The Standard for Program Management*, 2017, 42

17. a. Program A

The Internal Rate of Return (IRR) is the discount rate where the NPV for the cash flow is zero. There is no closed-form formula for it. IRR is computed iteratively, and “hone’s in” on the exact discount rate that produces a NPV of zero. Most spreadsheet software can calculate it. Given the data in this question, Program A is superior to the others. While the IRR discounts future values, it does not consider the size of a program. The funding environment is an enterprise environmental factor that involves areas outside of the program manager's control specially since strategic goals often change.

PMI®, *The Standard for Program Management*, 2017, 38

Milosevic, 2003, 44–45

18. d. The program business case

The business case is presented to the steering committee and contains numerous items to justify the proposed program. It also serves as the formal assessment of the business value the program is to deliver and justifies the needed resources.

PMI®, *The Standard for Program Management*, 2017, 35–36

19. b. An explicit program charter

Among other things, a key purpose of the charter Is to authorize the program manager and to enable the program manager to obtain funding and program approval.

PMI®, *The Standard for Program Management*, 2017, 36

20. c. Prepare a roadmap

The roadmap is useful in program planning. Its purpose Is to provide a chronological representation graphically to show dependencies between major milestones and decision points.

PMI®, *The Standard for Program Management*, 2017, 36

Initiating the Program/ Program Formulation

Practice Questions

INSTRUCTIONS: Note the most suitable answer for each multiple-choice question in the appropriate space on the answer sheet.

1. Your country, because of extensive traffic congestion, is trying to repair its railroad infrastructure, which is in decay. You are the program manager to do so, and your program's goal is to be able to increase the use of passenger trains as an alternative to driving. As you prepare your charter to improve the infrastructure of railroads in your country, you know your program will generate a lot of information. You want to ensure that the information you collect can be easily collected, shared and maintained. To do so effectively in your charter you used these data to—
 - a. Ensure stakeholder satisfaction
 - b. Promote knowledge transfer
 - c. Establish an easily accessible knowledge repository
 - d. Secure funding for an information resource management specialist on your core team

2. You have recently joined a corporation that is a leader in the development of products for the automotive industry. You are pleased to be selected as a program manager, because you know that this company has established a culture of management by programs. The company operates within a program management structure, and each program manager is responsible for products in certain years. To best align your program with your stakeholders' expectations, this means that—
 - a. You should include this item in your program charter
 - b. In performing a stakeholder analysis, you need to consider the other program managers
 - c. The way the organization is structured means that there is no need to compete for resources
 - d. The roadmap is essential
3. Assume you decide to conduct an initial scope assessment before you prepare your program management plan and other plans required for your program. You recognize such an assessment can be useful to determine the boundaries of your program as you do not want to have any scope creep on your program, and you want to communicate these boundaries to your stakeholders through their inclusion in your program charter. But to include the results of this scope assessment in your charter, you first need to—
 - a. Obtain approval from your sponsor through the portfolio management activities
 - b. Ask your sponsor for his approval
 - c. Obtain approval from your program steering committee
 - d. Consult with your key stakeholders
4. One of your weakest areas as a project manager and now as a program manager is risk management. You know it is a necessity to be proficient in this area and especially to then be able to look at a potential risk, do some critical thinking about it, and then turn it into an opportunity. You decided to take a course at your local University on risk management and read three leading books on risk management. You then decided to take the Project Management Institute's Risk Management Professional certification exam, and you passed. Now, as you work to manage the major program in your government agency, you just completed your risk register, which shows—
 - a. You are next developing an initial risk assessment
 - b. You are next developing your program risk management plan
 - c. You are considered the subject matter expert in the agency n risk management
 - d. You are now taking each risk in the risk register and determining its impact to the program's objectives

5. Although you are new to program management in your oil company, you have a long history of working on large programs in the aviation field. Plus, you have your PgMP. When you joined the oil company, you were asked to take over an oil refining program in a new area of the world for the company that was in trouble. You asked to see the program's charter after you were hired and learned the oil company lacked any required program documentation. You realize you will use this program to prepare the documentation for future programs. You decide to prepare your program charter and its first item is—
 - a. High-level risks
 - b. A description of your authority level
 - c. A detailed timeline with all milestone dates
 - d. A justification for the program
6. You have recently been assigned as the program manager on a global drug development project. You have read and thoroughly understand the program's business case and overall objectives. However, you are curious as to how its end state will benefit the organization, which is stated in the—
 - a. Program mandate
 - b. Preliminary project scope statement
 - c. Technical and economic feasibility study
 - d. Program charter
7. Assume you are the program manager reporting to the CIO of a Fortune 100 company. Yesterday, even though the company felt it had implemented all security measures possible, it was the victim of a cyber security attack. Today, your CIO appointed you as the program manager for a new program to ensure such an attack will not happen. You are working on your charter and are to present it to the CIO tomorrow. You are including—
 - a. The program's roadmap
 - b. Communication requirements
 - c. Privacy concerns
 - d. Strategic drivers

8. Assume you are working for company ABC. Recently, it has been losing key staff members; many of whom have been in the company for most of their careers to a competitor, CDE. In the exit interview, people explain they are frustrated with ABC's bureaucratic structure and their work in a silo department. CDE manages by projects using cross-functional teams. Since both companies are in the same city and specialize in the IT field, it is difficult to hire people in the first place and hard to retain them if another company offers more challenging work even at the same salary level. Recognizing this dilemma, the ABC CEO met with his senior staff, and they all agreed changes were needed. They realize the ways they had worked for decades were inappropriate, and they asked you to manage a program to determine what is necessary to make a major change. You knew program management would be a start and had your PgMP, so you decided to prepare a charter. As you prepared the charter, you looked at the existing projects under way and learned that one project in human resources was striving to hire people with program management expertise. This project—
- a. Should be a component in your program
 - b. Should be listed in the charter in its assumptions and constraints
 - c. Should be placed on a temporary hold until your program was completed
 - d. Could be viewed as a risk to your program
9. You are a program manager working for a conference planning company. Your program has been launched as a component of your company's portfolio. Your organization has been in existence for 10 years; therefore, as you prepare your program charter, you should include—
- a. How the program will deliver the desired benefits
 - b. Program component managers
 - c. Risk tolerance levels
 - d. Program budget baseline

10. The Commissioner of Baseball in your country has determined that while baseball truly is popular, unlike basketball or soccer, for example, it is only popular in a few countries in the world. Many people know nothing about it. Because of your expertise in program management, you have been retained by the Commissioner's Office to develop a program that would increase its popularity in the world. Such a program would lead to attracting more players from other countries to your country, establish a wider fan base than now exists, and enable the sport to grow, potentially with feeder systems or developmental leagues in other countries. It also would lead to greater revenues by playing games in different countries. You are worried that unlike soccer or basketball that have appeal throughout the world that baseball, which on the surface seems simple, actually is complicated. You also wonder how you would be able to attract a country that is not familiar with the sport to develop a league. These issues should be—
 - a. Recorded in a log
 - b. Brought to the Commissioner' attention before you take the position
 - c. Listed in the program charter
 - d. Listed in the business case
11. You have an aggressive schedule to complete your program to develop more uranium in your country than now exists since some of your country's uranium has been given to others. Rather than having the two years you told your government you needed to complete this program, it has shortened it to one year since uranium is needed for a variety of reasons. They set milestones by which time certain events need to occur. You believe the schedule is unrealistic, and you—
 - a. Have informed your program steering committee
 - b. Stated it in your charter
 - c. Shown it in your roadmap
 - d. Decided to use earned schedule to have metrics to show your concern

12. You work for a company that produces and distributes catalogs focused on luxury items such as jewelry, home furnishings, clothing, and accessories. In addition to the major undertaking of catalog production, several projects are under way to make the catalogs available online; ease of ordering and faster delivery time are key objectives. Many people in the company support the catalog production initiatives as well as some of the Web-based initiatives. The company should—
- Aggressively pursue the Web and discontinue its print production of the catalogs
 - Assign a program sponsor for these initiatives
 - Appoint a project manager to report directly to the CEO to coordinate activities
 - Implement critical chain scheduling to avoid potential bottlenecks in resource allocation
13. Resources seem to be scarce as you are to manage a complex program for your electric can opener company. While many people have electric can openers, and they are relatively inexpensive to purchase, the ones your company manufactures seem to have problems opening cans of larger sizes. Customer complaints led your management team to authorize a new program, which you are managing, so your company can produce at the same price and still receive its usual ROI an electric can opener that will open all sizes of cans. To develop it, you recognize you need mechanical engineers, experts in manufacturing, and experts in software to list a few. Your team needs to be one that has competencies in state-of-the art technology. You need to -
- Point it out in your charter
 - Discuss it with your sponsor as he is to get needed resources
 - Ask your program steering committee to intervene
 - Acquire contractor support
14. At times a program is established, and then specific components are added to it. In other situations, the projects and other activities that could comprise a program are already in progress, and they have similar benefits, which if managed as a program would then lead to more benefits for the organization than if they continued to be managed in a standalone way. Regardless of the approach that is used, the components should—
- Use the same governance structure
 - Be listed in the program charter
 - Compete for the same resources
 - Have similar key stakeholders

15. You are working in your city to have a new shopping mall that is centrally located. Your charter is under development, and if it is approved, you will be the program manager. You have not managed a program as complex as this one as in the past, instead, you worked on smaller programs or projects. This program is to have at least seven different projects, and they have been identified so far in the charter. You believe you should prepare—
 - a. A description of the other projects you believe you should add
 - b. A business case for a Program Management Office to support this program
 - c. A description of the methods you plan to use to procure external resources
 - d. A program timeline
16. Assume you are working for an international training company. It has decided to add several new lines of courses because it tracks its courses now to the Project Management Institute's publications and standards. You will be the program manager for these new courses, and you plan to have a team of people located in different countries to support you as you will want to translate each course into at least eight other languages and pilot test them in other parts of the world. After your program is initiated, you then will work to authorize the various projects within it. Furthermore, it is important to show how the eight components will deliver benefits, which is—
 - a. Used to start initiating the program
 - b. Part of program authorization
 - c. Stated as part of the program charter
 - d. Set forth in the preliminary program scope statement

17. Assume your University, which has the Association to Advance Collegiate Schools of Business accreditation for its business school and Global Accreditation Certification for its project management master's degree program, has decided to offer a doctoral degree in portfolio management. The Chancellor and other members of his senior staff asked the manager for the master's degree program in project management for data on the number of Universities in your country with similar project management degree programs. Everyone was astounded to learn there were about 200 Universities or Colleges with these degrees offered in both on site or in distance learning formats. The Chancellor asked you to be the program manager to develop a program for this doctoral degree in portfolio management to distinguish the University from others in the country. You told him you would submit a charter of your responsibilities and your needed level of authority to execute the program. As you prepare the charter, you realized a key item was a course in the project management program on portfolio management and whether it should be a pre-requisite in this doctoral program. In your charter, you listed it in the—
- a. Issues section
 - b. Scope section
 - c. Strategy section
 - d. Components section
18. As you prepare your program charter for your new program for your international training company, you have a vision of continuing as the industry leader. However, this is an internal initiative, and funding is a key concern, especially given the economy, and many people do not sign up for the existing courses until the last minute. You are working to initiate the program. This means which of the following people should be identified by this time?
- a. Program manager and program sponsor
 - b. Program manager and core program team members
 - c. Program manager and program management office (PMO) director
 - d. Program manager and program control officer

19. You are the program manager for a new ice cream flavor in your ice cream company. Since the company has been producing ice cream for about 40 years, you have a standard program management process to follow, and it is fairly straightforward each time a decision is made to produce a new type of ice cream. But of all the program managers in the company, you are the only one with the PgMP. Lately, your executives have noticed there are more competitors than ever before, and your ice cream products switched three years ago from a square box to a round box. Customer complaints have been increasing since then as customers complain they have too many difficulties opening the lid on the round container. Your CEO has appointed you to manage a program to not only solve this problem but also to review the entire offerings, simplify the manufacturing process, determine the ice cream flavors customers prefer, and survey those of the competition. In addition, you are to include potential other avenues the company should explore in addition to ice cream. Basically, you are managing a transformation program. You have stated the end state of this program is to determine future markets and how to improve current offerings, which is—
- a. The program's justification
 - b. The program's vision
 - c. The program's mission
 - d. The program's top two benefits
20. Your program has three benefits: increase customer satisfaction, improve the return on investment, and improve employee morale. Its vision is to be the number one used car dealership in your country with dealerships located in cities throughout the country with more than 25,000 people. These data are in your program's charter in a section titled—
- a. Benefits
 - b. Benefit strategies
 - c. Objectives
 - d. Mission



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Answer Sheet

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
6.	a	b	c	d
7.	a	b	c	d
8.	a	b	c	d
9.	a	b	c	d
10.	a	b	c	d

11.	a	b	c	d
12.	a	b	c	d
13.	a	b	c	d
14.	a	b	c	d
15.	a	b	c	d
16.	a	b	c	d
17.	a	b	c	d
18.	a	b	c	d
19.	a	b	c	d
20.	a	b	c	d



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Answer Key

1. d. Secure funding for an information resource management specialist on your core team

While the information management assessment is the output from the Information Management Assessment activity, it is an input to the program charter. The information needs of the program are considered to help determine any financial, organizational, or resource implications.

PMI®, *The Standard for Program Management*, 2017, 108

2. a. You should include this item in your program charter

The program charter includes a section on stakeholder considerations. It discusses the key stakeholders, the most important stakeholders, and the initial strategy to engage them.

PMI®, *The Standard for Program Management*, 2017, 93

3. a. Obtain approval from your sponsor through the portfolio management activities

While the output of the program scope assessment is an input to the program charter, it requires approval from the sponsor or stakeholders through portfolio management or stakeholder alignment activities.

PMI®, *The Standard for Program Management*, 2017, 110

4. a. You are next developing an initial risk assessment

In the program formulation a series of assessments are conducted as the program charter is developed. One of them involves risk management. The objective is then to use the output of this risk assessment, to develop your program charter. It is part of the performance competencies one should possess in the element of program formulation.

PMI®, *Project Manager Competency Development Framework*, 2017, 117

5. d. A justification for the program

Since this program is in trouble, you first need to state the justification for it to show why it is important and what it will achieve.

PMI®, *The Standard for Program Management*, 2017, 93

6. d. Program charter

The program charter provides the basis to commence the program. Among other things, the charter defines the vision (or the end state) of the program, describes how the program will benefit the organization, and describes the risks and issues.

PMI®, *The Standard for Program Management*, 2017, 93

7. d. Strategic drivers

The program charter should have a section on strategic alignment. This section then includes the strategic drivers and the program's relationship to the strategic objectives of the organization. It also includes any other strategic initiatives.

PMI®, *The Standard for Program Management*, 2017, 93

8. b. Should be listed in the charter in its assumptions and constraints

The assumptions and constraints section of the charter goes further and also includes dependencies and external factors and how they impact a program's objectives. The HR project is an example of a dependency.

PMI®, *The Standard for Program Management*, 2017, 93

9. a. How the program will deliver the desired benefits

In program formulation, the charter among other items includes the benefits strategy section, which describes the approach to ensure the planned benefits are realized.

PMI®, *The Standard for Program Management*, 2017, 93

10. c. Listed in the program charter

The program charter contains a section on risks and issues. Issues are concerns affecting a program as in this situation. They should be identified as the roadmap then is prepared.

PMI®, *The Standard for Program Management*, 2017, 93

11. b. Stated it in your charter

The charter contains a section of the timeline. In it the total length of the program Is explained, along with all key milestone dates.

PMI®, *The Standard for Program Management*, 2017, 93

12. b. Assign a program sponsor for these initiatives

This program could be set up to include project work for the Web initiatives as well as work on the ongoing activities to focus on benefits delivery from this work. A program sponsor should be assigned to oversee the program, secure funding for it, and deliver its intended benefits.

PMI®, *The Standard for Program Management*, 2017, 92

13. a. Point it out in your charter

The program charter has a section on resources in which resources needs are discussed along with the estimated costs with resources needs including staff, training, and travel as examples.

PMI®, *The Standard for Program Management*, 2017, 93

14. b. Be listed in the program charter

One part of a program's charter lists the program's components including how the projects and other components are set up to deliver the program's outcomes and intended benefits.

PMI®, *The Standard for Program Management*, 2017, 93

15. d. A program timeline

One part of the charter is the timeline. It shows the total length of the program and includes key milestone dates.

PMI®, *The Standard for Program Management*, 2017, 93

16. c. Stated as part of the program charter

Approval of the charter authorizes program commencement. Among other items, it includes a discussion of program components to describe how the projects and other components are configured to deliver the program's benefits.

PMI®, *The Standard for Program Management*, 2017, 93

17. b. Scope section

The scope section serves as an initial scope statement, which would be further elaborated in the overall program scope statement to be developed a part of program planning. Here, you are including it since the course exists, and you want to also include other high-level items that are within scope or out of scope as you feel it will be a question the master's degree project director will raise as he is on the program steering committee.

PMI®, *The Standard for Program Management*, 2017, 93

18. a. Program manager and program sponsor

The program manager and program sponsor are selected and assigned in program formulation.

PMI®, *The Standard for Program Management*, 2017, 92

19. b. The program's vision

The program's vision is stated in the program charter. It is the end state and how it will benefit the organization.

PMI®, *The Standard for Program Management*, 2017, 93

20. a. Benefits

This section in the charter addresses the key outcomes required to achieve the program's benefits and vision.

PMI®, *The Standard for Program Management*, 2017, 93

Planning the Program

Practice Questions

INSTRUCTIONS: Note the most suitable answer for each multiple-choice question in the appropriate space on the answer sheet.

1. As you work to develop a new washer and dryer that will not require any electricity and also will decrease your monthly water bill by 50% assuming you use the washer at least once per week, you have a complex program to manage. Thus far, even though you are still in the early phases of your program, you have six separate components in it. Now, you are developing the schedule for your program. Typically, the first step is to—
 - a. Use the schedules from the six components
 - b. Determine the component milestones
 - c. Determine the interdependencies between the components
 - d. Use the PWBS
2. You are Company A's program manager for the development of an online banking system that can be used on computers, tablets, or phones for your community bank, for which your company will receive \$20 million. Because the bank would like to implement this system quickly, it has also contracted with Company B. You must implement your system completely in six months to ensure that you beat Company B's schedule. At this point, you have an expense estimate of \$2.5 million. You will lose \$10 million if you cannot deliver the product in six months, but if you can complete it sooner, you will earn an additional \$25 million, for a total of \$45 million. Your risk management officer performs a risk analysis and tells you that there is a 70 percent chance that the program will be completed ahead of schedule. Your company has completed similar programs in the past; judging by these experiences, there is a 30 percent chance that your final expenses will increase by \$10 million. What is the expected value of your program if it is completed ahead of schedule?
 - a. \$29 million
 - b. \$32 million
 - c. \$42.5 million
 - d. \$45 million

3. Your firm is planning to bid on a program to do the entire work in another country. While your firm has an excellent track record in this type of work, it has never worked in this country before this possible opportunity. As the program manager part of the proposal involves the need to use 25% of the human resources from local labor in the country where the work will be done. This approach is different from how your company typically manages program work as it is accustomed to sending in an entire team to the location and completing the required work. To meet the local labor law requirement, you decided the best option for success was to—
 - a. Locate an onsite contractor and propose to contract with them to work on one of your components that was planned to be done late in the program
 - b. Ask for a fixed-price contract
 - c. Set up a teaming agreement with a local company in which the local company would lead the effort
 - d. Use a cost-plus-fixed-fee contract
4. You are managing a program to establish a new distribution center. The facility's location was selected because labor costs were low, but it is in a remote area. Now gasoline prices have increased 30 percent and are forecasted to rise another 20 percent in the next six months. In planning for the procurement of transportation services, you need to—
 - a. Prepare a market analysis of service providers
 - b. Recommend to your sponsor that the program be terminated, and the distribution center be moved to a more urban area
 - c. Prepare a contract management plan
 - d. Encourage bidders by providing simplified legal requirements in the form of standard terms and conditions

5. Your Agency Administrator was informed by the State government inspector that there is too much asbestos, and the Agency must be reallocated to a new site. The State government is providing a set budget for this move, but it is in an area that is not considered safe in the city. Regardless, the Agency must move to this new location, and there are four months to complete the move. You are the program manager for this effort, and you have resources that are working on other work that will be dedicated to your program as it is time sensitive to complete this move. Even with the dedicated resources, assume it is month two, and you have two months left to move everyone. You are doing your best with the limited funding to make the new facility one that is state of the art, and one component is focused on encouraging people to stay in the Agency given its new location. However, even with dedicated resources, today Component Manager A came to you with a resource issue as he needs an expert in fiber technology. No one has this expertise in your team. You need to—
 - a. Ask the State for additional funding to acquire this expert elsewhere
 - b. Ask the State to assign someone from another agency to help
 - c. Work with your Agency Administrator
 - d. Review historical information from previous programs
6. Studies show that on programs greater than 50% of the work is outsourced. Working as a contractor is done more frequently than ever before, and many people enjoy the variety of contract work. You are in the planning phase of a program to develop a new nuclear submarine, and it is planned to take eight years to complete the work. You plan to outsource about 78% of the work. You have 15 components in your program. Considering the amount of outsourcing work, you decided the best option was to—
 - a. Use a program-level prime contractor
 - b. Review each component and determine the best way to contract for its work
 - c. Send out a Request for Information
 - d. Use program-level contracts for some components and individual contracts for others

7. You are working on a program to build the largest resort hotel in your country. It will have complete up-to-date wireless technology, smart TVs, pools for people of different ages, three beaches, and 11 restaurants. While the resort is in an area that has beaches, the competition has not kept up with the technology changes, and the existing resorts have lost long-time customers. You believe a benefit of your program will bring tourists back to this area and improve the overall local economy. You had a competitive Request for Proposal for the architectural work, received seven bids, and selected a well-respected contractor to do the architecture work. A member of your team will oversee the work the contractor is doing. Your team member in charge of this component should have—
 - a. Access to design specifications
 - b. In the knowledge repository a place for the contractor to post the status of its work
 - c. Weekly meetings scheduled with contractor representatives to be apprised of progress, issues, or risks
 - d. An architectural engineer to support the component manager during this work
8. You are having difficulty determining financial metrics to use to track costs on your five-year program. It is compounded since your company does not track time and cannot then use earned value. You had people attend earned value training, but no one wanted to track time and stated they were professionals and could manage their time appropriately. But since your program will last five years, you need some type of metrics you can use. Although it will be a challenge, you decided to try to use—
 - a. Variance analysis
 - b. Control charts
 - c. Cause-and-effect relationships
 - d. Sensitivity analysis

9. Assume you are working on a program to review and then update as needed all the regulations in your National Highway Transportation Safety Administration especially since people now are using small helicopters for their travel of distances less than 100 miles in your country. Many of the regulations in your Agency were put in place when the Agency was established over 40 years ago, and therefore, a detailed review is needed. You have a major program to manage and are preparing your program work breakdown structure. Ideally, the best approach is to—
- Include the top two levels of each project's work breakdown structure (WBS) in the PWBS
 - Ensure project-related artifacts are part of the PWBS
 - Determine the management and control responsibilities of the project team
 - Simplify earned value reporting
10. You have prepared your program scope statement and your PWBS. Now, it is time to develop the master schedule for this program. An essential element as you develop it is—
- Determining the timing of individual components
 - Estimating required resources for each activity
 - Focusing on resource leveling across the constituent projects
 - Adjusting leads and lags
11. You are working to develop the budget for your program to produce a new type of drink that is non-alcoholic, but one will not notice it does not contain any alcohol at all. Therefore, the label will indicate there is no alcoholic content, but your marketing component will determine a way to show the beverage lacks alcohol, but people will be aware of it. In order to develop the budget, you are using all financial information that you have available and are listing income and payment schedules because—
- They will document contract payments and schedules
 - They will show operational costs
 - They will enable tracking costs as part of the budget
 - They will document funding schedules and milestones

12. You are the program manager on a multiyear, multimillion-dollar transportation program for your provincial government. Funding for your program is allocated on a fiscal year basis, yet your program transcends multiple years. Because of the challenges in cost estimating and the lack of additional funding to support your program, as the program manager in preparing the financial management plan, you should—
- Ensure component payment schedules, infrastructure and operational costs are included
 - Establish a set amount for the contingency reserve
 - Derive program estimates by using scenario analysis
 - Baseline each estimate
13. Your program is planned to take six years to complete its outcomes and realize its benefits. As a program manager, you will use contractors to supplement your own team. You also realize that only a few people will be on the program for its duration, and various contractors will complete their work at different time. Since each person involved brings different information assets to the program and gains additional intellectual property when they leave, you need to capture what they know that could benefit your program for others in the organization. The problem is most feel knowledge is power rather than knowledge assets are power. Therefore, you decided to—
- Set up a discussion forum and use it to collect information
 - Have a debriefing session with each employee when he or she leaves the program
 - Use an automated system so people can post their work
 - Establish an easy to use knowledge repository
14. On your offshore program in Greenland, you are outsourcing 75% of the work to be done. While you used a Request for Proposal (RFP) to award a contract to a prime contractor, only one firm submitted a bid. You then issued another RFP, but you had the same result. You had no choice but to accept this proposal, but the contractor then could not sign the contract as this firm was having difficulty finding a subcontractor needed for specialized work on site. You learned today that a subcontractor has been located that wants to do the work, but this subcontractor is demanding more money given the harsh weather conditions. As the program manager this situation shows—
- The need for early market analysis and feasibility studies
 - The need to determine the best fit of solutions
 - The need to update the financial framework
 - The need to review the cost estimate

15. You are working to prepare the financial framework for your program. In it, you are describing why the timing for when funds will be available is critical information to determine. You realize as you prepare this framework that the key challenge is to—
- Determine the sources of funding
 - Coordinate the funds when they are received
 - Cover the large negative cash flow the program will experience
 - Determine how funds are allocated
16. Program communications are definitely important. The program communications plan is the defining document as it includes the ways information will be generated, collected, distributed, stored, and retrieved. The communications plan is critical because—
- It is necessary for knowledge transfer
 - It provides the critical links between people and information
 - It ensures people are not overwhelmed with information on your program
 - It is the baseline document if stakeholders complain about the information they are receiving
17. Each cost estimate has assumptions associated with it. On your program you are told you lack the resources to use contractors as funds are too limited to do so. Your assumptions are that all resources – funds, resources, facilities, materials – will be available when you need them, and your resources will be able to dedicate their time to your program and released from any their responsibilities as documented in your charter. Another assumption is since you are managing a complex construction program, you will have long-lead items, which will arrive as specified. You have documented your assumptions, and your cost estimate has been accepted by your sponsor and your program steering committee. However, assume it is six months later, and you are in the program delivery phase. The long-lead items are going to be delayed by at least a month given weather conditions in transporting them to the construction site in the Antarctica. This delay then generates other delays including the realization of incremental benefits. Your next step is to—
- Inform your sponsor
 - Inform your program steering committee
 - Realize the estimate was wrong and reconsider the business case
 - Realize the estimate was wrong and reconsider the program charter

18. You are the executive sponsor of a program that provides global support services for supply chain integration. The program is experiencing quality problems in the individual components. After meeting with the program manager to discuss the issues, you suggest that one way to improve quality is to—
 - a. Identify alternatives on scope definition methods through inputs from subject matter experts
 - b. Apply a common approach to the creation of the work breakdown structure across components for consistency in scheduling, resourcing, and cost control
 - c. Align acceptance criteria for the deliverables across phases and components with the program objectives
 - d. Set standards that are relevant to the entire program
19. Assume your firm is the lead of a consortium, which consists of three of your competitors, to develop the next generation of space technology so people can travel to far distant planets such as Jupiter and Saturn. Your executive management decided it would have a greater opportunity to bid on this contract from the National Space Agency if it formed a consortium rather than bidding on it alone. It proved to be a successful decision, and you are the program manager for this exciting initiative. The government desires active involvement and asked if its representative can be part of the overall steering committee for the program. Of course, you agreed, which shows—
 - a. The consortium is working to be customer facing
 - b. The voice of the customer will be heard outside of regularly scheduled meetings hopefully enhancing overall quality
 - c. The funding organization will be an active stakeholder
 - d. You will know the Space Agency's communications requirements and can best plan how to achieve them

20. Your program is focusing on program quality management as it is one for your pharmaceutical firm in which the quality of its products is paramount to the success of its drugs on improving patient's lives. In addition, your program will undergo regulatory inspections before it can be approved for actual use. It is the first time your company is developing and then manufacturing a completely new drug to make sure no one ever has high blood pressure, rather than just manufacturing generic drugs others have developed, so quality is essential to overall success. Your executives have mandated that the government's quality standards be followed as well as those of your company. As you prepare your program quality management plan, you should—
- a. Include quality checklists to be used
 - b. Set forth a quality assurance system
 - c. Define the cost of quality
 - d. Have a quality policy as the first part of the plan



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Answer Sheet

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
6.	a	b	c	d
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11.	a	b	c	d
12.	a	b	c	d
13.	a	b	c	d
14.	a	b	c	d
15.	a	b	c	d
16.	a	b	c	d
17.	a	b	c	d
18.	a	b	c	d
19.	a	b	c	d
20.	a	b	c	d



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Answer Key

1. d. Use the PWBS

The PWBS serves as the framework for the program's master schedule and is essential for building realistic schedules, developing cost estimates and organizing the work.

PMI®, *The Standard for Program Management*, 2017, 123

2. b. \$32 million

You will earn the difference between \$20 million plus 70 percent of the additional \$25 million and \$2.5 million in expenses plus 30 percent of the additional \$10 million in expenses, or—

$$[\$20m + (0.7 \times \$25m)] - [\$2.5m + (0.3 \times \$10m)] =$$

$$(\$20m + \$17.5m) - (\$2.5m + \$3m) =$$

$$\$37.5m - \$5.5m = \$32m$$

NOTE: Remember that expected value is calculated as probability multiplied by the monetary value of the risk.

Milosevic, Dragan Z. 2003. *Project Management ToolBox Tools and Techniques for the Practicing Project Manager*. Hoboken, New Jersey: John Wiley & Sons, 311–314

PMI®, *The Standard for Program Management*, 2017, 120

3. c. Set up a teaming agreement with a local company in which the local company would lead the effort

As your company is new to the area and with 25% of the procurement slated to be done by resources in the new country, the teaming agreement is the best option. It is preferable as it places the responsibility on the local company to complete the work, reduces the risk to your company, and it gives your company the opportunity to learn more about this country and other opportunities.

PMI®, *The Standard for Program Management*, 2017, 117

4. a. Prepare a market analysis of service providers

In Program Procurement Management Planning, early and intensive planning is critical to success. Often an analysis of alternatives is conducted such as requests for information, feasibility studies, and market analysis. The purpose is to determine the best fit of services and solutions to meet the program's needs. The market analysis can help to understand potential competition.

PMI®, *The Standard for Program Management*, 2017, 117

5. c. Work with your Agency Administrator

This situation is an example of one in which resources are not available on the program. It means the program manager should contact the larger organization, in this case, the Agency Administrator for assistance.

PMI®, *The Standard for Program Management*, 2017, 119

6. c. Send out a Request for Information

Since the program manager is in the planning stage in procurement management, a Request for Information is useful to learn about the capabilities, expertise, and interest of contractors considering your program. Once you analyze the information you receive, it will be useful in determining procurement strategies.

PMI®, *The Standard for Program Management*, 2017, 117

7. a. Access to design specifications

The information management activity gathers and retrieves information through several methods. One approach is systems that enable access to technical documentation such as engineering drawings, design specifications, and test plans.

PMI®, *The Standard for Program Management*, 2017, 116

8. c. Cause-and-effect relationships

Financial metrics are necessary to measure program benefits. It is a challenge, and an effective way is to use cause-and-effect relationships, but they are difficult to establish given the length of the program.

PMI®, *The Standard for Program Management*, 2017, 115

9. a. Include the top two levels of each project's work breakdown structure (WBS) in the PWBS

Decomposition stops at the level of control the program manager requires, which is the first one or two levels of each project's WBS.

PMI®, *The Standard for Program Management*, 2017, 123

10. a. Determining the timing of individual components

During Program Schedule Management Planning, the timing of components is determined, which enables the program manager to determine when benefits will be delivered and identifies program external dependencies.

PMI®, *The Standard for Program Management*, 2017, 121

11. c. They will enable tracking costs as part of the budget

Once the budget is determined, it then is the baseline for the program, and costs are tracked against the budget.

PMI®, *The Standard for Program Management*, 2017, 115

12. a. Ensure component payment schedules, infrastructure and operational costs are included

In developing the program's financial management plan, it expands on the financial framework. While this plan contains a number of items, the program manager includes component payment schedules, operational costs, and infrastructure costs.

PMI®, *The Standard for Program Management*, 2017, 115

13. b. Have a debriefing session with each employee when he or she leaves the program

A debriefing session is one way to learn about the information assets the employee brought to the program and their contribution to its success. It also can serve to ask questions about what the employee learned while he or she was on the program.

PMI®, *The Standard for Program Management*, 2017, 116

14. a. The need for early market analysis and feasibility studies

Early market and feasibility studies could have provided key information about the difficulties involved in locating contractors to do specialized work in remote areas. It then could have led to a more complete cost estimate and budget.

PMI®, *The Standard for Program Management*, 2017, 117

15. c. Cover the large negative cash flow the program will experience

Unlike a project, programs last longer and incur costs often years earlier than their realized benefits. The financing objective is to obtain the funds to bridge the gap between paying money for development before benefits are realized.

PMI®, *The Standard for Program Management*, 2017, 114

16. b. It provides the critical links between people and information

Program communication management activities provide the critical links between people and information; these links are necessary for successful communications and decision making.

PMI®, *The Standard for Program Management*, 2017, 112

17. c. Realize the estimate was wrong and reconsider the business case

Ideally, assumptions analysis should have been done before the assumptions were documented, but it was not, and key assumptions in the cost estimate, which affects the total cost of ownership, is unfounded. The program manager must now reconsider the business case or the program management plan.

PMI®, *The Standard for Program Management*, 2017, 113

18. d. Set standards that are relevant to the entire program

A key purpose of Program Quality Management Planning is to identify the standards that are relevant to the entire program and to specify how to satisfy them. To ensure overall program quality, the different quality assurance and quality control requirements can be coordinated, and others added as needed.

PMI®, *The Standard for Program Management*, 2017, 118

19. c. The funding organization will be an active stakeholder in this situation since the government providing funding and wants to be on the program steering committee, rather than a passive one.

PMI®, *The Standard for Program Management*, 2017, 114

20. d. Have a quality policy as the first part of the plan

Program quality management activities of the organization include a quality policy. It should be in the quality management plan, preferably at the beginning. If the organization lacks a quality policy, which would be unlikely in this situation, the program team should determine one.

PMI®, *The Standard for Program Management*, 2017, 118

Executing the Program: Program Delivery

Practice Questions

INSTRUCTIONS: Note the most suitable answer for each multiple-choice question in the appropriate space on the answer sheet.

1. As the program manager for the annual construction program for a large government agency, you prepared the program management plan and scope statement that were approved by your program steering committee. Nine months later, a small group of influential stakeholders wants to increase the program's scope by including all maintenance and operations of the buildings. You should—
 - a. Demonstrate the return on investment to the organization for increasing the scope of the program
 - b. Reject the proposal because maintenance and operations typically are outside of the scope of programs
 - c. Respond favorably because programs have a wide scope that may need to change to meet and exceed the organization's benefits expectations
 - d. Prepare a component initiation request

2. As program manager for a global payroll application, you have project teams in Bangalore, Singapore, London, and Washington, D.C. So far you have five components in these locations plus two in headquarters. The program is to be completed including training in it in two years. You will be exchanging a lot of information with component managers, and they will be exchanging it among themselves and with you and the program team. This means you should—
 - a. Have a knowledge transfer specialist on your program team
 - b. Allow each location to use its own process for gathering needed information and exchanging relevant parts of it
 - c. Pay attention to the accuracy and timeliness of the information
 - d. Ask each component manager to rely extensively on lessons learned from past programs
3. Since your program is complex and is scheduled to last five years to deliver its planned benefits, as the program manager you want to periodically evaluate the program's overall quality since it involves developing a new food additive, and regulatory approval will be required. You decided to conduct quality assurance audits every six months. The first audit was useful, and there were several recommendations you plan to implement since it showed you had a new quality standard to implement to meet requirements of the Food and Drug Administration that also will affect other work in your company. Your next step is to—
 - a. Analyze the component's quality control results
 - b. Monitor deliverables and results to ensure they comply with quality standards
 - c. Use the audit findings to update the program's quality requirements
 - d. Prepare a change request to submit to the program steering committee
4. You are meeting with the team member who is responsible for the program management information system (PMIS) for your program. Because the data that will be captured are of a scientific and medical nature, the PMIS will generate more than eight terabytes (8,000 gigabytes) of data. Given the critical importance of the PMIS, you realize the importance of—
 - a. Consolidating existing data to maximize storage capability
 - b. Using the information repository
 - c. Producing timely and valid inter-project information
 - d. Defining the program data naming conventions

5. Many organizations that practice portfolio management for programs and projects use enterprise resource planning software. Your large program to implement a culture that focuses first on a standardized approach to portfolio management in which every proposed project or program must be justified with a business case and formally approved by a Portfolio Review Board before it can be initiated is using enterprise resource planning software. It is also beneficial at the individual program and project levels. However, it represents a major change initiative. Since you are using it on your program, your best course of action is to—
 - a. Use your program management office (PMO) for support with this change
 - b. Handle it through the portfolio management office
 - c. Have a core team member work with it throughout the program
 - d. Set it up so that a program control framework is also established
6. Your program management plan for your program for new pharmaceutical product to assist people with insomnia without any adverse side effects has been approved. Already, you have three projects in this program, and you have selected the project managers. You also have a subsidiary program, and a core team of four people who report directly to you and who helped in the planning phase. With these components, as the program manager, you need to—
 - a. Provide support and guidance on individual initiatives
 - b. Align personnel aspirations to available roles
 - c. Ensure the importance of each component is recognized
 - d. Assign team members with similar personalities to the same components to reduce the risk of team conflict
7. Your company is small and has only 90 people. Its annual sales are about \$5 million US and have been at this amount for the last three years. Recently, the CEO and the other two senior executives met and prepared a long-term strategic plan for the next three years. The company provides services primarily in the government market and has a high win rate but a low capture ratio, which has made it difficult for the company to grow. The executives want to focus on improving the capture ratio. You are the program manager to help lead your organization into one that has annual sales in the \$15–20 million range in the next two years. Your program management plan has been approved, and you are now to deliver the program's benefits. You must concentrate on—
 - a. Managing scope, schedule, and cost
 - b. Optimizing program components
 - c. Monitoring change
 - d. Making make-or-buy decisions

8. You have been selected by the Administrator of the National Aeronautics and Space Administration to plan and execute the next new program at its Cape Canaveral campus. This is a highly classified program, which will take the United States into space throughout the galaxy into the 2030s. Your program will last six years, and you have received approval of your program management plan plus approval for six components. You know other components will be added later. It is important to therefore—
 - a. Redefine the priorities of components
 - b. Ensure your team has the needed competencies for this program
 - c. Recognize your resources for your core tam are separate from those managing components
 - d. Establish the program's organizational structure with a project management information system that is easy to access and use
9. Your program has seven projects in it. You have a PMO as well, which will support your program, and a core team of five people who also report to you. However, you are working now to manage the resources of your program, and you need to consider as you do so—
 - a. Information from status reports
 - b. Human resource planning
 - c. The program's communications management plan
 - d. Establishing an adequate compensation plan
10. You are managing a program to develop a new source of energy that can be used in the northern and southern hemispheres when solar power is not available. Working with your core program team and your program steering committee, you have identified a number of component projects. However, your company has several key projects under way, and resources will be difficult to acquire for this new program. You realize program procurements will be needed, and the key objective then is to—
 - a. Coordinate use of external resources
 - b. Use a variety of contract types depending on the components
 - c. Set standards for the components
 - d. Determine the impact on the morale if external resources are used

11. Your program is to develop a cure for leukemia in six years, including time for regulatory approval. Obviously, the benefits of this program are huge and have far-reaching societal benefits. You are working to prepare a baseline budget for this program and have had your program management plan approved, along with approval of seven components. In doing so, you are—
 - a. Focusing on component costs
 - b. Using your PWBS
 - c. Including component costs and program costs
 - d. Assessing the cost of using contractors for the majority of the needed resources
12. You are managing a program to develop a new product to protect all workers from germs in the workplace, so everyone is assured that the workplace is clean. They will not have to worry in the future if a co-worker has a transmittable disease. However, you have just learned that there was a failure to adhere to a major scope element in the work breakdown structure (WBS) of one of the key projects. This problem means that—
 - a. Interactions and realignment of this project must be managed
 - b. Rebaselining may be required
 - c. A change request has been approved
 - d. New metrics are required
13. You are working on an emergency response program for your city and have realized that you lack the needed resources to support your program. Over the years, your organization's Procurement and Contracts Department has compiled a qualified seller list. This list will be extremely helpful to you when you—
 - a. Prepare your program procurement management plan
 - b. Issue requests for proposals (RFPs) or requests for quotations (RFQs)
 - c. Plan contract evaluation criteria
 - d. Advertise in the local newspaper for your procurement requirements
14. As you work on this emergency response program for your city, you recognize you will need a number of different types of supplies and services to support your program and its component projects. One common approach is to use—
 - a. Expert judgment
 - b. Formalized proposal evaluation criteria
 - c. Screening systems
 - d. Weighting systems

15. As a program manager, once your team is in place you need to focus on—
 - a. Providing mentoring
 - b. Setting up a team-based reward and recognition system
 - c. Promoting integrity in all interactions
 - d. Striving to be a role model for the team
16. You have identified seven candidate components to comprise your program. You also have identified seven capable project managers to manage these components who have the requisite knowledge, skills, and competencies to do the required work against an aggressive schedule and with demanding stakeholders. Before each project can officially begin, it is important that—
 - a. The program's business case is updated
 - b. The scope of work is formalized
 - c. A component initiation request is approved
 - d. Each project has a defined charter
17. Assume you are the program manager for your pharmaceutical company for a new product designed to cure sleep apnea. As part of your program potential patients will not need to first go to a hospital to diagnose whether they have this condition and stay the night. You of course must get regulatory approval and conduct numerous clinical trials before your new product is ready, so your program will last at least five years. You hope to be the first to market with this product even though your business development manager has said that a competitor is also working in this area. Based on your previous work on long programs, you know it is hard to sustain morale among your team, and many often then volunteer to work on projects that may be in trouble just to see results. Therefore, this time, you are—
 - a. Setting up a process where your resources are dedicated to your team and cannot be used on other projects
 - b. Analyzing the risks associated with possible poor morale of team members
 - c. Asking each team member to sign a commitment statement to your program as he or she joins your team
 - d. Having weekly performance reviews with your project managers, who in turn will have similar performance reviews with their team members

18. Program reporting is essential in Program Delivery, and each program tends to have numerous stakeholders, which increase each time a new component is added to the program. As the program manager, you are preparing reports and gathering information from your components to do so. The next step is to—
 - a. Use the information distribution activity
 - b. Make sure that information is available in a format that has a template, so a lot of time is not spent on the reporting process
 - c. Set up the reports to be provided on a weekly basis to all stakeholders
 - d. Evaluate the program status while maintaining current program information
19. Working on a major program to upgrade the software used in your country's airspace system to make it far easier for the air traffic controllers to use and also to avoid incidents of their falling asleep at times when there is limited activity or having tremendous stress when there is a lot of activity, you are facing many challenges in your role as a program manager. You have seven projects on your program and expect to add others. One project is about to close. You need to make sure before it does close that—
 - a. Deliverables are complete, and scope is compliant with the functional overview
 - b. A request to close the project is prepared and sent to the program steering committee
 - c. The detailed administrative procedures for program closure have been followed, which are managed by your Program Management Office
 - d. The program manager and team have been reassigned to other projects now that this project is complete

20. Program management is new to your company. You are managing the first program as you have taken program management training and have a track record of successfully managing complex and multiple projects. Your team is new to program management, and no one on the team has been exposed to it. Some team members have questioned the new approach, and others have asked why the organization has decided to manage projects as programs rather than as standalone projects. The project managers on your program are concerned they may lack visibility in this concept, limiting their opportunities for advancement and benefits. This shows that you must—
- a. Persuade them that program management is desirable and becoming a program manager then can be the next step in their career
 - b. Set up a training session for your project managers and team members to explain the benefits of program management
 - c. Establish an open-door policy and invite anyone who has concerns to meet individually with you or to call you without any fears that in doing so their performance may be criticized
 - d. Establish a policy of “no surprises” and provide your team with the same status information that the other stakeholders receive

Answer Sheet

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
6.	a	b	c	d
7.	a	b	c	d
8.	a	b	c	d
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13.	a	b	c	d
14.	a	b	c	d
15.	a	b	c	d
16.	a	b	c	d
17.	a	b	c	d
18.	a	b	c	d
19.	a	b	c	d
20.	a	b	c	d



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Answer Key

1. d. Prepare a component initiation request

Although programs have a wide scope that may require changes to meet the organization's benefits expectations, this request is for a new component to the program. Therefore, the program manager prepares a component initiation request for the program steering committee to evaluate against the organization's selection criteria.

PMI®, *The Standard for Program Management*, 2017, 100

2. c. Pay attention to the accuracy and timeliness of the information

Managing all of the information on a program is a significant and continuous task. It therefore is important to pay attention to the accuracy and timeliness of the information to avoid errors and make informed decisions.

PMI®, *The Standard for Program Management*, 2017, 130

3. d. Prepare a change request to submit to the program steering committee

Quality assurance change requests are an output of Program Quality Assurance and Control. While the program manager can implement some change requests on his or her own, in this situation the audit revealed a recommendation that involves other work in the company. Therefore, this change request should go to the program steering committee.

PMI®, *The Standard for Program Management*, 2017, 132

4. b. Using the information repository

An information repository is invaluable especially when one needs to refer to past decisions or prepare trend analysis based on historical information. It should be easy to use to find information of interest and to contribute program information to it.

PMI®, *The Standard for Program Management*, 2017, 132

5. a. Use your program management office (PMO) for support with this change

A PMO can assist the program manager in many ways, one of which is to provide support when there are program-level change management activities as in this situation.

PMI®, *The Standard for Program Management*, 2017, 20

6. c. Ensure the importance of each component is recognized

The majority of the people working on this program will be working on components. As the program manager, one then is expected to ensure the importance of each component is recognized by the organization and is well understood by each person working on it.

PMI®, *The Standard for Program Management*, 2017, 17

7. b. Optimizing program components

The purpose of the program delivery phase is to provide management, oversight, integration, and optimization of the components in the program. The components will deliver the program's benefits and realize value for the organization. These activities continue in program delivery and relate to initiating, changing, transitioning, and closing the components.

PMI®, *The Standard for Program Management*, 2017, 100

8. a. Redefine the priorities of components

Each time a component is added or transitions or closes, the program manager must redefine the priorities of existing components to ensure there is optimal resource allocation and management of interdependencies between components. This prioritization is ongoing in Program Delivery Management.

PMI®, *The Standard for Program Management*, 2017, 100

9. b. Human resource planning

In Program Resource Management, human resource planning is useful to identify, document, and assign program roles and responsibilities to individuals and groups. Resources should be allocated to meet key program needs.

PMI®, *The Standard for Program Management*, 2017, 133

10. c. Set standards for the components

Use of contractors is common on programs, and program managers have a variety of tools and techniques that can be used. The key objective is to set standards for the components, which may involve qualified seller lists, pre-negotiated contracts, blanket purchase agreements, and formal evaluation criteria.

PMI®, *The Standard for Program Management*, 2017, 131

11. c. Including component costs and program costs

In Program Cost Estimating, the program budget includes the cost for the components as well as those for the resources and infrastructure to manage the program. The baseline budget then is the financial target used for measuring the program's performance. Updates to the baseline are an output from Program Cost Estimating.

PMI®, *The Standard for Program Management*, 2017, 129

12. a. Interactions and realignment of this project must be managed

In the Program Delivery Phase, the program manager is responsible to maintain alignment from components with the program to deliver the program's benefits. At the program level, interactions with components are essential to accomplish goals to position the program to deliver its benefits. The program manager must manage each component in a consistent and coordinated way and oversee the performance of the program's components.

PMI®, *The Standard for Program Management*, 2017, 95

13. b. Issue requests for proposals (RFPs) or requests for quotations (RFQs)

Qualified seller lists often are used when RFPs, RFQs, or requests for information (RFIs) are issued. They can save time in the overall program procurement management process because they list only known sellers who can provide needed products and services.

PMI®, *The Standard for Program Management*, 2017, 131

14. b. Formalized proposal evaluation criteria

Program managers have many tools and techniques available to conduct program procurements and must set standards for the program's components. Formalized proposal evaluation criteria are a best practice to follow and are one standard used at the program level for components.

PMI®, *The Standard for Program Management*, 2017, 131

15. c. Promoting integrity in all interactions

As PMI members according to the “Code of Ethics and Professional Conduct”, honesty is a critical component as one must “understand the truth and act in a truthful manner both in our communications and in our conduct”. By promoting integrity in all interactions, the emphasis is to behave honestly, provide facts, confront dishonesty, and challenge any system that encourages dishonesty or rewards. Ethical behavior must be practiced on programs.

PMI®, IPMI Code of Ethics and Professional Conduct. Available from <http://www.pmi.org>

16. c. A component initiation request is approved

Component planning is performed in the Program Delivery Phase and is integrated at the program level. The component must properly support the program’s outcomes before it is authorized. The program manager prepares a request to initiate a new component initiation request and submits it to the program steering committee for approval.

PMI®, *The Standard for Program Management*, 2017, 95, 100

17. b. Analyzing the risks associated with possible poor morale of team members

Risk management includes risks concerning people. In this situation, if there is a concern that there may be poor morale among team members, this poor morale can jeopardize the program in terms of its delivery of benefits and business value. Risk analysis techniques are useful to support program management decisions. The analysis includes costs, schedules, and performance outcomes for components and their interdependencies as well as the effect on the entire program.

PMI®, *The Standard for Program Management*, 2017, 135

18. a. Use the information distribution activity

Program reporting supports program governance and stakeholder engagement. It consolidates performance and reporting related data, so stakeholders are informed as to how resources are being used to deliver benefits. Reporting aggregates information across the program and then is provided to stakeholders using the information distribution activity with needed status and deliverable information.

PMI®, *The Standard for Program Management*, 2017, 127

19. b. A request to close the project is prepared and sent to the program steering committee

When a component reaches the end of its life cycle or as program-level milestones are reached, the program manager works with the customer or sponsor to prepare a formal request to close the program. It is sent to the program steering committee for review and approval.

PMI®, *The Standard for Program Management*, 2017, 101

20. d. Establish a policy of “no surprises” and provide your team with the same status information that the other stakeholders receive

The same information that is given to other stakeholders is communicated to program team members and those working on a component. It provides them with general and background information about the program as communications are a two-way information flow.

PMI®, *The Standard for Program Management*, 2017, 127



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Controlling/Program Performance Monitoring and Controlling

Practice Questions

INSTRUCTIONS: Note the most suitable answer for each multiple-choice question in the appropriate space on the answer sheet.

1. As a program manager on the next generation nuclear submarine, you have six components so far in your program, and this is only year one. You know additional projects and perhaps a subsidiary program will be added as the program continues since it is scheduled to last for at least seven years. One of your responsibilities is to ensure that common activities among components are coordinated to maximize the use of resources and achieve benefits that would not be possible if the components were managed in a standalone fashion. This is done in the—
 - a. Program Performance Monitoring
 - b. Benefit Management
 - c. Resource Prioritization
 - d. Resource Interdependency Management

2. You know from your work on programs that change is inevitable on both on the overall program and its projects. As a program manager for this nuclear submarine program, you use a change management system as part of the program management information system (PMIS). You do this during part of your work in—
 - a. Integrating overall change control
 - b. Working to deliver incremental benefits
 - c. Monitoring and controlling scope
 - d. Monitoring and controlling program performance

3. Your program, which designs, develops, and manufactures a class of farm equipment that can be used above the Arctic Circle, has been requested to consolidate data and status for a key stakeholder. Part of your work involves maintaining a spare parts inventory and fulfilling spares requests for clients. In consolidating your performance report, you—
 - a. Do not include the spares data because they are really not part of the defined program and do not fit the definition of a project
 - b. Include the spares data, even though they are program activities, because they are part of the program
 - c. Include the spares data because you can reasonably define fulfilling a spares order as a project
 - d. Ask the stakeholder who requested the report whether he or she wants to see the spares data
4. You have been asked to assume the management of a program to rebuild the water desalination plant for your city. Much of the equipment on the job is being leased. The program has been under way for more than five years. You decided to conduct an audit of the hundreds of lease agreements, and you found that you are making payments on leases for equipment that is not being used. Your next step is to—
 - a. Set up a system to alert your team to this problem on future leased resources
 - b. Use a resource register
 - c. Recommend corrective actions
 - d. Inform your program steering committee because it is focused on the program's financial status
5. Your program to produce the first polycarbonate city car is making progress. The client is concerned that the cost to manufacture the car will cause the car to be priced at a level that the average consumer cannot, or will not, pay. The client has asked you to see whether you can reduce the cost of manufacturing the vehicle yet still meet the specifications. Such customer feedback requests are helpful and are part of—
 - a. Establishing a cost change management system
 - b. Preparing program reports
 - c. Determining when to take corrective actions
 - d. Implementing a lean Six Sigma manufacturing processes

6. You have been asked to assume the management of a program to rebuild the water desalination plant for your city. You are using earned value on your program. The schedule performance index indicates that you will not meet your proposed schedule, and you are only about 20 percent complete to date. You need to—
 - a. Issue a revised schedule to your program team
 - b. Update the program master schedule
 - c. Update your budget baseline
 - d. Inform your program steering committee
7. Assume you are working for a large oil and gas company, which is implementing program management. Recognizing program management was the trend, you decided to get your PgMP® as you had been managing programs in the true definition but had the title of Senior Project Manager. Your manager was impressed and suggested to the CEO that you manage a new program to expand the company into coal mining. While it is new to you, you have a core team of four people, and one is a new hire with expertise in the coal mining industry. You have decided of the other three people that one will be responsible for documentation management, including developing needed plans and reports; one will integrate the work of the nine components; and the other person will be responsible for monitoring and controlling. You decided to combine these two functions because—
 - a. Monitoring then determines whether controlling is needed
 - b. It will eliminate the need to convene meetings often with the program steering committee
 - c. Controlling activities will be numerous given it is a completely new area for the company
 - d. Controlling transcends the program life cycle
8. Assume you are managing a program for the judicial branch of your government, and you are reporting to the Chief Information Officer of the Administrative System of the Courts. The program is the number one priority on the Court's list of ongoing programs and projects in the portfolio. The purpose of your program is to manage a legacy system conversion program, and thus far with your nine components, your program team has identified a number of scope changes to monitor, which means as the program manager, you should—
 - a. Determine if the program's assumptions are still valid
 - b. Restrict activities only to the allocated level for components
 - c. Ensure the planned scope corrective actions are executed in a timely way
 - d. Update the scope management plan

9. It is important to address and control scope changes on programs to ensure successful program completion. These scope changes can originate from many sources including—
 - a. Risks
 - b. Stakeholders
 - c. Missed milestones
 - d. Resource reallocations
10. Assume your program to host the next World's Cup Soccer Game in your country is so massive and involves so many cities that you are outsourcing much of the work. Therefore, since on your last program, which was to update legacy systems used only internal resources, you know you need to demonstrate a competency in administering program procurements. You also need to monitor contractor performance. The performance expectation is to—
 - a. Direct component managers through provider interactions
 - b. Ensure component managers document contract resolutions
 - c. Direct component managers to conduct procurements
 - d. Determine cross-component procurement decisions
11. You realized in your work on the next generation nuclear submarine that since it will last seven years, you will probably have scope changes. You want to prepare for them and be able to exploit them as much as possible. However, because most scope changes have associated costs, every proposed change requires analysis to determine whether it should be implemented. If change requests are accepted and approved, the next step is to—
 - a. Communicate the decision to the stakeholders involved
 - b. Update the program management plan
 - c. Revise the project work breakdown structure
 - d. Work with the component manager to implement the change
12. A schedule change request is approved for your program. It is estimated to require an additional \$1 million. Your program steering committee recommended to the executive sponsor that this scope change be approved to maintain a competitive advantage. Your next step is to update the—
 - a. Program management plan
 - b. Budget baseline
 - c. Program work breakdown structure
 - d. Scope management plan

13. You are the legacy system conversion program manager in your company. You have a request now to update the company's business development/sales tracking system, which was not in your business case. Your program steering committee recognizes the importance of including this project in your program and asks you to prepare a cost estimate for this new project. The committee approves your estimate. You now should—
- Communicate changes to the budget baseline
 - Revise the cost management plan
 - Prepare a resource management plan
 - Identify staffing needs
14. Because of their size, complexity, and duration, programs tend to be more important than projects in most organizations, and program managers tend to interact more with senior management, often through the program steering committee that oversees the program. Throughout the program, it is especially important to continuously monitor and control the program. It is helpful to—
- Conduct impact assessments
 - Identify areas that need attention
 - Optimize the components
 - Influence factors that lead to change with effective program metrics
15. You are the program manager on a mergers and acquisition (M&A) team that is responsible for integrating your company with the one it has recently acquired. The company you acquired has a history of failure in such mergers; your company is now its fourth owner, and unfortunately, things are not going well. In a meeting with your executive sponsor after the last program steering committee review meeting, he suggested that you set up—
- Forecasts
 - A different governance structure
 - Benchmarking studies
 - A program audit
16. In a program performance meeting, you asked the project manager of Project A what the status was on her program. She responded by saying that the total project budget of \$600,000 was evenly allocated over the project's six-month life. She has just completed the second month of the project and has finished 50 percent of the work. What earned value method information is available thus far?
- Earned value
 - Planned value
 - Actual costs
 - Earned value and planned value

17. Quality is extremely important in your pharmaceutical company. As a newly appointed program manager, you want to make sure your program is in compliance with relevant quality policies and standards and will conduct quality assurance audits. It is important in Program Quality Control to—
 - a. Complete checklists
 - b. Use key performance indicators
 - c. Ask your sponsor to obtain a quality specialist to be on your program team
 - d. Focus on cross-program inter-component relationships
18. You are a program manager on an international program that relies on contractors for approximately 75 percent of its work. Some of the contracts apply to a specific project, but five contracts span six of the projects. You have one blanket purchasing agreement, which enables you to obtain temporary resources as required for this complex program. In terms of Program Contract Administration, you should review the—
 - a. Program reports
 - b. Contract administration plan
 - c. Agreements administration plan
 - d. Change requests
19. Your program is beginning to miss key milestones because of delays by your customer, with whom you have a contract. Your goal is to ensure that corrections are made as quickly as possible, so you decide to conduct a contract performance review earlier than planned. At the program level, it is your responsibility now to—
 - a. Prepare a change request
 - b. Document the causes for the delay and bring it to your attorney's attention
 - c. Ensure the budget is being spent properly
 - d. Document the delay and discuss it with the program steering committee
20. You are preparing for a meeting of your program's steering committee. On your program, you are using earned value for monitoring, control, and forecasting. The planned value is \$30,587, and the earned value is \$26,365. You are working on a customer-imposed schedule for the completion of the program. Looking at the schedule variance (SV), you conclude that—
 - a. The SV is -\$4,222, and the program is behind schedule
 - b. The SV is 1.16, and it appears that the schedule will be met
 - c. The program is behind schedule, and the tasks on the critical path are affected
 - d. The budget at completion is \$46,475, but the delays are insignificant

Answer Sheet

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
6.	a	b	c	d
7.	a	b	c	d
8.	a	b	c	d
9.	a	b	c	d
10.	a	b	c	d

11.	a	b	c	d
12.	a	b	c	d
13.	a	b	c	d
14.	a	b	c	d
15.	a	b	c	d
16.	a	b	c	d
17.	a	b	c	d
18.	a	b	c	d
19.	a	b	c	d
20.	a	b	c	d



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Answer Key

1. d. Resource Interdependency Management

Resources must be shared across the program, and the program manager controls the schedule for these shared resources.

PMI®, *The Standard for Program Management*, 2017, 133

2. c. Monitoring and controlling scope

Scope monitoring and controlling is necessary to ensure the program is successful. To administer and manage scope, a change management activity is necessary.

PMI®, *The Standard for Program Management*, 2017, 137

3. b. Include the spares data, even though they are program activities, because they are part of the program

At the program level, in preparing performance reports, these reports summarize progress of components in the program. The summarization includes both the projects, subsidiary programs, and program activities to provide a complete picture of the entire program.

PMI®, *The Standard for Program Management*, 2017, 127

4. c. Recommend corrective actions

To avoid penalties or ongoing lease payments, leased resources should be tracked to ensure that they are returned when the lease expires or when they are no longer needed. Based on the audit findings, it is now necessary to request changes or recommend corrective action.

A program whose costs exceed budgets may no longer justify its business case. Even minor overruns must be justified.

PMI®, *The Standard for Program Management*, 2017, 127–128

5. b. Preparing program reports

Program reporting coordinates performance data to provide stakeholders with information on resource use to determine effectiveness in delivery of program benefits. Customer feedback requests are an output of this activity.

PMI®, *The Standard for Program Management*, 2017, 127

6. d. Inform your program steering committee

At this point, it is obvious the program will not meet its schedule. The first step is to inform your program steering committee based on approval thresholds especially since the program is about the 20% complete date. Then a decision as to the next steps and the corrective actions to be performed can be made.

PMI®, *The Standard for Program Management*, 2017, 101

7. a. Monitoring then determines whether controlling is needed

Continuous monitoring is useful for program managers for insight into the program's health and to identify areas requiring special attention. But, monitoring then determines if controlling activities are needed especially if the program veers from its alignment with strategic goals.

PMI®, *The Standard for Program Management*, 2017, 101

8. b. Restrict activities only to the allocated level for components

In program scope monitoring and controlling, the program manager is responsible for determining which components are affected and updates the program work breakdown structure. However, in large programs, the number of affected components may be great and difficult to assess. The program manager then restricts activities to manage scope changes to the allotted level of components, avoiding controlling component scope, which has been further decomposed by the component managers.

PMI®, *The Standard for Program Management*, 2017, 137

9. b. Stakeholders

Monitoring and controlling scope are critical to program success. These scope changes may originate from stakeholders, program components, previously unidentified requirements, or external sources.

PMI®, *The Standard for Program Management*, 2017, 137

10. a. Direct component managers through provider interactions

The performance criteria for administering program procurements is to manage procurement relationships and monitor contractor performance. It leads to the expectation of directing component managers through provider interactions, and it is done while evaluating provider performance against an established service level agreement or statement of work and by monitoring performance if a provider contributes to multiple components.

PMI®, *Project Manager Competency Development Framework*, 2017, 128

11. b. Update the program management plan

In Program Scope Monitoring and Controlling, a change management activity is a necessity. When change requests are accepted and approved, the program management plan, the program work breakdown structure and the program scope statement are updated.

PMI®, *The Standard for Program Management*, 2017, 137

12. b. Budget baseline

The program budget baseline is updated as an output of Program Financial Management. Monitoring finances and controlling expenditures are critical aspects of ensuring the program meets its funding goals. A change of this magnitude requires the need to update the budget baseline.

PMI®, *The Standard for Program Management*, 2017, 127–128

13. a. Communicate changes to the budget baseline

Adding this new project means the program's budget baseline will require updates. The program manager in Program Financial Management then communicates changes to the budget baseline to governance groups and to auditors at the program and component levels.

PMI®, *The Standard for Program Management*, 2017, 128

14. b. Identify areas that need attention

Through continuous monitoring, the program manager and the program team have insight into the current program health and can identify areas requiring special attention. It then determines if and when controlling activities are needed.

PMI®, *The Standard for Program Management*, 2017, 101

15. a. Forecasts

Program performance report are part of Program Performance Monitoring and Controlling. Forecasts enable the program manager and other stakeholders to assess the likelihood of planned outcomes. They also provide predictions of the program's future given the information and knowledge available.

PMI®, *The Standard for Program Management*, 2017, 101

16. d. Earned value and planned value

For the earned value (EV) of the project, note that half the work has been completed, for an EV of \$300,000. The planned value (PV) through month two is \$200,000. The estimate was \$600,000 spread evenly over six months (or \$100,000/month).

PMI®, *The Standard for Program Management*, 2017, 101

PMI® PMBOK Guide Sixth Edition, 2017, 262–263

17. a. Complete checklists

In Program Quality Control, checklists often are used to assist in monitoring to ensure components or program deliverables and results meet quality requirements and lead to benefits realization. Quality control completed checklists are an output of Program Quality Control.

PMI®, *The Standard for Program Management*, 2017, 132

18. c. Agreements administration plan

The agreements administration plan is used in Program Contract Administration. Once agreements are signed, the administration and closeout of many contracts are handled at the component level. When they are handled at the program level, the component managers coordinate and report deliverable acceptance, contract changes, and other issues to the program team.

PMI®, *The Standard for Program Management*, 2017, 131

19. c. Ensure the budget is being spent properly

As contracts are awarded during Program Contract Administration, it is the program manager's responsibility to maintain visibility in the procurements to ensure the budget is spent properly to obtain program benefits.

PMI®, *The Standard for Program Management*, 2017, 131

20. a. The SV is -\$4,222, and the program is behind schedule

Schedule variance (SV) is calculated by subtracting the planned value (PV) from the earned value (EV); that is, $SV = EV - PV$. At this point, the SV is -\$4,222. The program is behind schedule; however, without additional information, the effect on the critical path is not known.

PMI®, *The Standard for Program Management*, 2017, 101

PMI® PMBOK Guide Sixth Edition, 2017, 262–263

Closing the Program

Practice Questions

INSTRUCTIONS: Note the most suitable answer for each multiple-choice question in the appropriate space on the answer sheet.

1. Although your program was short in duration to reduce the size of your company by 40% because of global competition, it was high in complexity, and you had eight different components. While morale was exceedingly poor as the program was under way by its employees, one of the components was to assist the employees who were affected in locating positions in other organizations. This project was successful as it helped 75% of the people find jobs elsewhere. Now the program is ready to close. At this point, it is important to ensure—
 - a. The program manager becomes the benefit transition manager
 - b. All stakeholders are informed the program is to close
 - c. A knowledge repository is established
 - d. The program manager works closely with the project managers
2. You are managing a program for the first time in your telecom company. It is to convert all the existing phone lines in your city to ones that are underground to prevent outages during hurricanes and tornadoes, which are common to your region of the country. You realize that since you have seven projects in this program that various projects will close at different times during the life cycle of your program. These projects are—
 - a. Limited to the project's life cycle
 - b. Scheduled for closure
 - c. Followed by a certificate of program completion
 - d. Limited to closure of each project

3. As the closing manager for a program that has been under way for five years in your company, you must ensure that all deliverables were completed and that program objectives and measurable program success criteria were met. You meet with the former program manager, the program steering committee, key stakeholders, and members of the program team. To further confirm that all the work has been completed, you review the—
 - a. Program work breakdown structure (PWBS)
 - b. Program charter
 - c. Benefits register
 - d. Program management plan
4. You are the program manager in charge of a radically different way to produce stents that only will use robotics. It will also be manufactured with robotics, eliminating the need for suppliers. Staff members will work with the team to develop the robots and ensure they comply with quality standards and will pass regulatory reviews. You have five components in your program, and you believe your competitors are not aware of it. Your program steering committee is chaired by your CEO and meets monthly with decision-point reviews or to conduct periodic health checks. You were called to a meeting with your CEO unexpectedly today and learned your company purchased another medical device company, and the merger will be finalized in two weeks. He learned this company also has a similar robotics program under way, and it is in the manufacturing phase so—
 - a. Your program will be terminated
 - b. Your program will be merged with the other company's program
 - c. Your program will need to submit a revised business case and develop a new approach
 - d. Your program will need to submit a new roadmap
5. You are in the closing phase of managing a major program in your company. Your program included 11 separate contracts and was a significant endeavor for your organization. Your program steering committee asked your PMO to conduct an individual review to make sure all procurement closure activities are complete. It should focus on—
 - a. Those contracts that were terminated for convenience or default
 - b. The procurement management plan
 - c. The contract management plan for each of the 11 contracts
 - d. Any outstanding issues

6. You have been managing a program to deliver a new tractor that will use 75 percent less fuel. The program is ready to close, and activities then to sustain the benefits will be transitioned to the product support group. During this transition, you need to make sure—
 - a. The operations group has been involved in the program as a key stakeholder
 - b. Estimates of the costs to sustain the benefits are finalized
 - c. Stakeholders have signed off on product acceptance criteria
 - d. Component transition requests have been submitted
7. You established a program support function to provide ongoing product support for the heating, ventilating, and air-conditioning program for the new class of amphibious warfare vehicles. Prior to transitioning your program's work to this group, you need to ensure—
 - a. Successful, on-time product delivery
 - b. The program steering committee is consulted
 - c. That attention is paid to benefits sustainment
 - d. That all documented benefits are realized as planned
8. Assume on your program to combine your government agency with another agency that performs similar functions has six components. One of them, Component A, involved how duplicative activities and their associated resources would be managed is ready to close. This component took time since neither agency had an inventory of all the activities under way, and of course people working on them did not want to share information as they felt if they did so, they might lose their jobs. However, the component manager of Component A showed all its deliverables were complete, and its benefits were realized. As the program manager, your next step is to—
 - a. Close the program
 - b. Release the resources that are not required
 - c. Meet with your sponsor
 - d. Meet with your program steering committee

9. You work with numerous contractors and suppliers on your program. Your company considers two of the contractors to be valued partners; however, three of the contractors have not worked on any previous programs or projects for your company. Furthermore, one supplier and two contractors have worked with competitors, and one contractor uses a competitor as a supplier. In closing your program, you need to ensure—
 - a. Each contractor has signed a nondisclosure agreement
 - b. A final performance review is held with each contractor
 - c. A decision is made to determine whether any of the three new contractors should be added to the qualified supplier list
 - d. All deliverables are completed satisfactorily
10. You are the Business Change Manager on a mobile workforce initiative to decrease the costs associated with office space. As a result of this initiative, 2,000 employees now work in their homes, thereby saving the company millions per year in lease fees. Now that the culture change has been complete, you are working to close this program. You realize program closure activities are distinct from those of other phases of program management because closure activities—
 - a. Do not require involvement with sellers or suppliers
 - b. Occur at the end of the program life cycle
 - c. Are handled by someone who is appointed as the closing manager
 - d. Occur throughout the program
11. Assume it is time to prepare your final report to close your new product development program. This means you need to describe in it—
 - a. Actual work performed
 - b. Contractors to be added to the qualified supplier list
 - c. Program documentation archive plan
 - d. Knowledge transition
12. Resource disposition is an important aspect of program closure, so the resources can be used elsewhere in the organization. Releasing resources is handled by—
 - a. The program manager
 - b. The program sponsor
 - c. The PMO Director
 - d. Program governance

13. Lessons learned can be reported in various ways. For consistency and quality, each program should adopt a standard approach. In the closing phase of the program, the program management team should—
 - a. Address the advantages and disadvantages of the methods used to gather and report on lessons learned
 - b. Share lessons learned with the organization
 - c. Survey the customer and the team for overall program satisfaction
 - d. Report these lessons learned to the chief knowledge officer
14. You have been appointed closing manager for a program that has been under way for eight years. You have met with the program manager to talk about lessons learned. You have also met with the core program team members and reviewed the lessons learned that were documented by each of the six projects in this program. Your next step is to—
 - a. Select the key lessons learned and archive them
 - b. Add any additional lessons learned to the program's final report
 - c. Index each project's records
 - d. Assign metadata tags to the records so they can be easily located using a content management system
15. As program manager, you follow a detailed closure process that was developed by the enterprise program management office. You have customized this procedure somewhat to fit the unique requirements of your program. Project C is now in its closing phase. This means it is your responsibility to—
 - a. Conduct a performance review with the project team members
 - b. Reallocate resources to other components or programs
 - c. Perform a final performance review
 - d. Update personnel records
16. You are about ready to close your program but still have several administrative tasks to perform. Once you complete them, you will submit your recommendation to your program steering committee to officially close the program. They will close the program if internal or external conditions lead them to terminate it, but this is not the case with your program. Therefore, they will look at—
 - a. The final report
 - b. Whether the business case is fulfilled
 - c. Whether the program charter is fulfilled
 - d. Lessons learned for programs in process and future programs

17. You are managing the development of a series of heating, ventilation, and air-conditioning products. Each product is being managed as a separate project in your program. Because the products will be completed at different times, you have a product support group. Your team has also established a configuration management system as a subsystem of the overall program management information system. Changes have been requested to the product that was delivered in Project A. These changes affect the product from Project B, which is in production. You focus on—
- Responding to customer complaints regarding the product already delivered from Project A
 - Ensuring that support is properly scheduled for Projects A and B
 - Ensuring that a policy of zero defects is implemented as part of the quality assurance and control activities
 - Conducting a thorough audit and extensive testing of future products before they are delivered
18. Each project in your program, Program B, is developing a specific product. Together your program will have eight separate products once it is complete. You establish a product support group to provide ongoing support for all the products in your program. A critical success factor is to ensure that—
- Staff members are physically collocated with the project team
 - Support is available on a 24/7 basis
 - Support is properly scheduled when changes are made
 - Knowledge transfer activities are performed
19. You are the program manager responsible for product development for your company's Class C vehicles. You have six projects in this program. After five years, the program is finally in the closing stage. It is time to begin program financial closure when—
- Benefits are delivered
 - A financial closing statement has been prepared
 - All contractors have been paid
 - Budget allocation reconciliation is complete
20. A critical part of program management is managing the intellectual property that is created. One of your senior engineers left the company three weeks before your program was complete. A key scientist departed a year early. For program success you need to ensure that—
- Lessons learned are readily accessible
 - Program staff are not able to join competing firms at any time
 - The organization conducts exit interviews with anyone who leaves the program
 - Knowledge assets are transferred into the organization's knowledge repository

Answer Sheet

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
6.	a	b	c	d
7.	a	b	c	d
8.	a	b	c	d
9.	a	b	c	d
10.	a	b	c	d

11.	a	b	c	d
12.	a	b	c	d
13.	a	b	c	d
14.	a	b	c	d
15.	a	b	c	d
16.	a	b	c	d
17.	a	b	c	d
18.	a	b	c	d
19.	a	b	c	d
20.	a	b	c	d



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Answer Key

1. d. The program manager works closely with the project managers

The program manager works closely with the component managers to ensure project outputs and outcomes are effectively transitioned to the program, and project benefits are assimilated and sustained.

PMI®, *The Standard for Program Management*, 2017, 13

2. b. Scheduled for closure

The Component Transition and Closure process is followed as each component closes. All of its areas are reviewed to ensure benefits are delivered, and the transition to other projects and sustaining areas is complete. Final component status is reviewed with the program sponsor and the program steering committee before authorizing formal closure.

PMI®, *The Standard for Program Management*, 2017, 97

3. b. Program charter

The program ends if its charter is fulfilled or conditions arise that bring the program to an early close. The charter is reviewed before the program is closed.

PMI®, *The Standard for Program Management*, 2017, 102

4. b. Your program will be merged with the other company's program

In this situation the program could be terminated. However, in the information provided about the other robotics program other than that it is in the manufacturing phase, the best approach is to merge the two programs and determine the best contributions and benefits of each program after the merger is finalized.

PMI®, *The Standard for Program Management*, 2017, 90

5. d. Any outstanding issues

Key activities are performed in Program Procurement Closure. They include ensuring each contract has been formally closed and all deliverables have been completed satisfactorily, all payments have been made, and there are not any outstanding contractual issues.

PMI®, *The Standard for Program Management*, 2017, 140

6. b. Estimates of the costs to sustain the benefits are finalized

As part of Program Financial Closure, estimates may be required to determine costs of sustaining the benefits of the program. While many of these costs may be captured in the program delivery phase as components are delivered, there may be some residual activities required to oversee the ongoing benefits.

PMI®, *The Standard for Program Management*, 2017, 139

7. b. The program steering committee is consulted

Prior to program transition the program manager should meet with the program steering committee to determine if the program has met its desired benefits, the transition work has been performed successfully, and there is a sustaining activity to oversee the benefits from the charter.

PMI®, *The Standard for Program Management*, 2017, 97

8. c. Meet with your sponsor

When a component reaches the end of its life cycle, the program manager then collaborates with the sponsor in this situation to present a request to close the component.

PMI®, *The Standard for Program Management*, 2017, 101

9. d. All deliverables are completed satisfactorily

In Program Procurement Closure, each contract must be formally closed after confirming all deliverables have been satisfactorily completed, all payments have been made, and there are no outstanding issues.

PMI®, *The Standard for Program Management*, 2017, 140

10. d. Occur throughout the program

Program closure activities do not occur only at the end of a program; rather, they occur throughout the program, each time a component is completed. All components must be completed, and all contracts must be closed before the program closes.

PMI®, *The Standard for Program Management*, 2017, 97, 102

11. c. Program documentation archive plan

The program's final report contains information to be applied to future programs and projects to improve future success. Among other things, it should include a program documentation archive plan.

PMI®, *The Standard for Program Management*, 2017, 102

12. d. Program governance

Efficient and appropriate release of resources is essential. At the program level, the program governance handles resource releases as part of a number of activities leading to program closure approval.

PMI®, *The Standard for Program Management*, 2017, 140

13. b. Share lessons learned with the organization

Lessons learned are a key part of knowledge transfer in program closure. As part of this activity, the program management team assembles the program's performance and shares lessons learned with the organization.

PMI®, *The Standard for Program Management*, 2017, 102

14. b. Add any additional lessons learned to the program's final report

Upon program completion, knowledge transfer is performed. It is done as the program management team assesses the program's performance and shares lessons learned with the organization. As a result, the final report may require updates.

PMI®, *The Standard for Program Management*, 2017, 102

15. b. Reallocate resources to other components or programs

It is necessary to ensure resources are released as the program is closed. Team members and funding may be reallocated or reassigned to other initiatives or programs. Resources from a component may be reassigned to another component in the program or to another program that requires similar skills.

PMI®, *The Standard for Program Management*, 2017, 102

16. c. Whether the program charter is fulfilled

The program charter is the key document the program steering committee reviews before deciding whether to close the program. While they may require a final report, as specified in the program governance plan, the charter is used to decide if closure is warranted.

PMI®, *The Standard for Program Management*, 2017, 102

17. b. Ensuring that support is properly scheduled for Projects A and B

After a product is deployed, any support must be scheduled to avoid interruption to the customers' use of the item to the greatest extent practicable. Benefit sustainment may be handled through product support, service management, change management, user engagement, or customer support.

PMI®, *The Standard for Program Management*, 2017, 97

18. d. Knowledge transfer activities are performed

As benefits are transitioned to other organizations for sustainment, it is necessary to include knowledge transfer activities to support ongoing benefit sustainment. This is handled by providing the new supporting organization with documentation, training, or materials.

PMI®, *The Standard for Program Management*, 2017, 102

19. a. Benefits are delivered

Program financial closure begins when sustainment budgets are developed, benefits are delivered, and sustainment has started.

PMI®, *The Standard for Program Management*, 2017, 139

20. a. Lessons learned are readily accessible

Lessons learned should be identified and documented throughout the program management processes. As people leave and when the program closes, lessons learned should be regularly accessible to existing and future programs to avoid any pitfalls and for continuous learning.

PMI®, *The Standard for Program Management*, 2017, 102

Program Benefits Management

Practice Questions

1. Your company's CEO embarked on a major change initiative for the next five years and presented a vision statement to all the employees. He set up 131 different change initiatives, which in effect are projects. You have been selected to be the program manager to support and manage these change initiatives, and you are reporting to the CEO and other members of the C-suite. Your role in managing them as a program is to deliver greater benefits to the company. The overall benefit from these projects as a program beside facilitating change since people tend to resist it is to—
 - a. Enhance current capabilities
 - b. Improve employee productivity
 - c. Provide a new method to work more effectively
 - d. Enhance customer satisfaction
2. Programs are established to deliver more benefits than the subsidiary programs and projects in them. This emphasis on realization and ultimate sustainment of benefits is central to why a program is essential. The outcomes from the program's components contribute to benefit delivery as well by—
 - a. Meeting stakeholder expectations
 - b. Ensuring the program's business case is followed
 - c. Refinement of the program and its components strategy
 - d. Determining when a component should be added to the program or deleted from it

3. Working on the next generation of computing since Cloud computing, as the program manager for the G6 program, you believe you have a major innovative, new development product. You are developing this new product for a client, firm MNO, and now you are at a point in your program where one of the projects in this G6 program is complete. You are delivering it to the MNO client representative, who wants to measure now how this benefit has helped MNO. Measuring benefits should focus on—
 - a. The degree to which the benefit has been adopted and used by its intended recipients
 - b. The level of customer satisfaction achieved, as measured by specific surveys
 - c. The ability of benefits to translate into value
 - d. The morale of the individual employees who are responsible for executing the new process or operation
4. In your work on the G6 program, which was set up with eight separate projects, since each project in it has inter-relationships with other projects especially in terms of the benefits to be delivered, you decided one best practice to follow was to track the benefits described in your benefit delivery plan in a benefit register and make this register visible not only to your entire team but also to your client, firm MNO. This register is updated—
 - a. When benefits are delivered incrementally
 - b. Benefits are transferred to product support
 - c. During benefits analysis and planning
 - d. When the program is closed
5. A key program objective is benefit sustainment. Assume you are working on a major program for a blockchain initiative that will be a private one, and in your program, you will select the people who can participate on one of your component projects. You have prepared your business case and your benefits management plan, but certain components will finish ahead of others. You then want to focus on these components to sustain their benefits. By doing so, you—
 - a. Assume responsibility for the sustainment efforts
 - b. Prepare the sustainment plan
 - c. Determine new programs or projects based on sustainment activities
 - d. Have the component manager prepare the sustainment plan for his or her component

6. Working on your personal helicopter program for company BCD, one of your first tasks as the program manager was to build on the benefits identified and recorded in the benefit register and prepare a benefits delivery plan. Now, you are measuring how each benefit is realized, which means you are working in—
 - a. Benefits management
 - b. Benefits analysis and planning
 - c. Program stakeholder engagement
 - d. Benefits delivery
7. Finally, your program, G6, which has taken the concept of Software as a Service to the next level, and your eight separate projects as well as some ongoing work, is complete. As program G6 is closed, now benefit management is focusing on a number of key initiatives, including—
 - a. Having the ability to use the program's benefits
 - b. Ensuring that the benefits delivered are in line with the original business case
 - c. Ensuring stakeholder agreement on the factors contributing to the benefits
 - d. Verifying the program has met or exceeded benefit realization criteria
8. Assume your program to prevent *e coli* [a major type of bacterial infection found in food, water, and animals] is nearly complete. It is a major breakthrough for citizens of all nations, and your CEO made this program the number one program in the company. You have delivered all the benefits in your benefit management plan and are working to transition your program to operational areas. You decided to—
 - a. Handle the transition since you are the program manager
 - b. Work with operations as an equal partner from the start
 - c. Use a contractor
 - d. Have each component manager handle the transition once the component is complete

9. Your program to truly make people feel safe using bitcoins finally is complete. Your company decided to be a leader in this field when it was announced in 2009, and then you were appointed as the program manager with numerous components with the goal of showing why it is important and how to expand its use. With the increasing number of users, you have been successful, and your executives asked you to take on the next big change initiative since this program lacks future value. At this point, you are transitioning the benefits of your work. In doing so, you need to remember—
 - a. To involve operations
 - b. To ensure all stakeholders agree
 - c. To avoid the need to go to operations
 - d. To involve a contractor
10. Working to completely transform an outdated regulatory authority in your government has proven to be a challenging program. When you were appointed to manage this program, many feared for their jobs and were suspicious as to what you were doing. While you involved many people as you identified the benefits of this transformation and published the results, skeptics remained. Finally, after an intense six-month period with five components, the program is complete, and you are ready to transition your work. However, some people still are not sure of their new role. During the transition process, you should—
 - a. Conduct numerous workshops
 - b. Show performance against published benefits
 - c. Continue to monitor the results
 - d. Ask the authority director to issue a memo to each employee
11. You are the program manager for a new telecommunications product in which if a phone were to get wet or damaged in any way, it could completely recover all its functionality and data. You are working hard to complete this product quickly in response to customer complaints and to stay ahead of the competition. Time to market with a quality product are essential. You are working closely with your governance board and have bi-weekly benefit reviews. These reviews are instrumental as they—
 - a. Serve as performance reviews
 - b. Ensure outputs will meet acceptance criteria
 - c. The window of opportunity remains
 - d. The benefits will be easily transitioned into operations

12. Each program should have a benefit value proposition, an example of one is—
 - a. Promised outcomes are achieved
 - b. Benefits are delivered too late
 - c. The program is aligned with the organization's strategy
 - d. Life cycle costs exceed the proposed benefits
13. You estimate on your program for the next generation appliance in which each home will only need one to cover all people typically will have too many stakeholders with all the consumers who are anxiously awaiting its launch. Omitting the consumers, you still have over 250 stakeholders who have an interest in, influence over, have power, and authority. You classified them into groups using the salience model. You also are updating your stakeholder register monthly since different stakeholders will have different interests based on the life cycle phase. You then need to as you evaluate KPIs to consider ones related to meeting—
 - a. Stakeholder acceptance criteria
 - b. Stakeholder satisfaction
 - c. Stakeholder expectations
 - d. Stakeholder requirements
14. Assume you are the program manager to change a major oil refining factory in your company to one that is completely solar even if the sun is not shining. Your leaders appointed you as the program manager, and you helped prepare the business case noting this program was necessary for the societal good and to reduce the effect the oil factory has on climate change. So far, you have eight components in your program with more to be added since it is an eight-year program and identified benefits as part of your business case. You now are preparing your benefit management plan. This plan formally—
 - a. Documents activities to achieve the program's planned benefits
 - b. Defines the metrics and KPIs to measure success during benefit delivery and transition
 - c. Guides delivery of benefits during program performance
 - d. Provides policies to manage the overall benefits management effort
15. In working on the benefits management plan for your program, it should be the baseline document to—
 - a. Focus on the systems needed for the changes from your program
 - b. Guide delivery of benefits
 - c. Determine when the transition to an operations state will occur
 - d. Define the process to manage the overall benefits effort

16. While wearing glasses or contact lenses is fairly common and has few difficulties once one is accustomed to doing so, having a similar experience with hearing aids is a major problem for many. Recognizing the aging population in your country, you prepared a business case for a new program for a hearing aid that would have five major benefits: be easy to use, not require numerous battery changes, not be observable, be able to use while swimming or in any other sports, and be comfortable. It also is to be priced less expensively than the traditional hearing aids now available. Even though it is a product, to reduce the payback period, you devised a strategy such that some early versions of the product be released with incremental benefits based on closed components; you have 15 components now in the program. Having identified these five main benefits and prepared your benefits management plan, it is only appropriate then to update your—
- Benefits delivery process
 - Charter
 - Business case
 - Roadmap
17. Resources are limited in your avionics company. While the company has state of-the-art products under way and on the market, it also has legacy products, which still are used by the industry. Many of these SMEs have retired who support the legacy products, and others are considering it. You are managing a program to develop a talent retention program. Its major objectives are to ensure all company products can be supported and to reduce the need to hire expensive contractor resources. You are working to analyze and plan the benefits of this program and decided to title it in your business case – the Avionics Mentoring Program. Its three components thus far are during the interview process to have three people at different levels talk with the potential candidate to see if he or she shares the same values, once hired to pair the new candidate with a mentor who is experienced in the company's work, and then to later as the candidate is experienced to ask him or her if he or she wants to work to mentor newcomers to the company. The benefits then are to have people who are hired support the corporate objectives and values, have a mix of skilled people at various levels, and increase knowledge transfer in the company. A risk though to consider is—
- Candidates will feel the vetting process is too strenuous
 - Stakeholders will not accept the benefits
 - Critical resources may not be allocated appropriately
 - People will not exploit the change

18. Assume you are managing a new program designed to ensure that your country, which typically imports goods and services, instead has a proposal to begin to increase the goods and services it produces to avoid the high cost of importing. You are the program manager for this initiative and report to the director of the Export Control Board. After two years, you have met your initial goals, and now your country has among other things started to produce its own line of automobiles, kitchen products, and washer and dryers. Your sponsor has asked you to close the program, although you will manage its next phase. You are now transitioning to operations. However, to sustain the benefits—
- You will need involvement after the transition
 - It is unclear whether the program will provide funds to operations
 - The transition is going to be smooth as operations' stakeholders have been involved from the start
 - The governance board has approved the operational work
19. Assume you are managing a program to merge your University with four others in the same part of your country. Your University is the lead. The program includes components to determine technology changes, resources, systems, and training and will take three years to complete. Now you and your team are analyzing information about organizational and business strategies, internal and external influences, and program divers. You are doing so to—
- Ensure your program's goals are aligned with those of your University
 - Ensure you have sufficient people from various disciplines to be on your team
 - Determine the overall strategy you plan to follow
 - Identify and qualify the benefits your stakeholders will realize
20. You are the program manager for your government agency, and because of lack of funding for it, you must transform the organization and kept its most valued functions and institute a reduction in force by 30 percent. Everyone in the agency is concerned their positions will be eliminated and is actively seeking jobs elsewhere. As it is difficult to find jobs as most are outsourced to contractors, and people do not wish lose their pensions, you need to minimize the negative impact from your program. You decide to—
- Hold a meeting with everyone in the agency to explain why the program is necessary
 - Ask people in the agency as to where the cuts should occur anonymously
 - Assign responsibility and accountability
 - Work closely with the legal, marketing, and human resources departments



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Answer Sheet

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
6.	a	b	c	d
7.	a	b	c	d
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16.	a	b	c	d
17.	a	b	c	d
18.	a	b	c	d
19.	a	b	c	d
20.	a	b	c	d



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Answer Key

1. a. Enhance current capabilities

Examples of benefits beside facilitating change are to enhance current capabilities, create or maintain assets, offer new products or services, or develop new opportunities to generate value.

PMI®, The Standard for Program Management, 2017, 3

2. c. Refinement of the program and its components strategy

The program's strategy should be aligned with the organization's strategy and adaptive if the organization's strategy changes. The program's components are the way benefit delivery is realized, but in addition they are used to refine the strategy of the program and its components.

PMI®, The Standard for Program Management, 2017, 4

3. c. The ability of benefits to translate into value

Value delivery is essential in benefits delivery. Value delivery focuses on ensuring the program delivers the intended benefits, and they translate into value. There may be only a small window of opportunity to accomplish the realization of a planned benefit and for it to generate value.

PMI®, The Standard for Program Management, 2017, 52

4. c. During benefits analysis and planning

The benefits register is updated in benefits analysis and planning. Then program benefits are mapped to components based on the roadmap, and the register is reviewed with stakeholders to define and review KPIs and other measures to monitor program performance.

PMI®, The Standard for Program Management, 2017, 50

5. b. Prepare the sustainment plan

The program manager is responsible for preparing the sustainment plan for ongoing sustainment of program benefits. Ideally, he or she should work with component managers when doing this plan, but it is the responsibility of the program manager to prepare it. The program manager plans the post transition activities.

PMI®, The Standard for Program Management, 2017, 55

6. d. Benefits delivery

In benefits delivery, the emphasis is to ensure the program delivers the expected benefits as stated in the benefits management plan. It also involves preparing a defined set of reports or metrics and providing them to stakeholders to assess the overall health of the program.

PMI®, *The Standard for Program Management*, 2017, 51

7. a. Having the ability to use the program's benefits

During benefits transition, the purpose is to transition benefits to operational areas and to ensure they can then be sustained. Value is delivered when the organization, community, or other beneficiaries can use these benefits.

PMI®, *The Standard for Program Management*, 2017, 53

8. c. Use a contractor

This program is large and complex. While transition may be a formal activity within the organization, contractors also can be used. In many cases given the scarcity of available resources, using contractors is a preferred approach.

PMI®, *The Standard for Program Management*, 2017, 54

9. c. To avoid the need to go to operations

This situation is an example of the need to not transition to operations. Your program charter has been fulfilled, and your executives have decided to end the program, meaning operations are not necessary to continue to realize benefits as the chartered program lacks future value to the company.

PMI®, *The Standard for Program Management*, 2017, 54

10. a. Conduct numerous workshops

As part of the transition activities, it is important to determine if the changes have been successfully implemented. In this situation, with people still unsure of their new roles, a benefit transition activity to perform is to improve the acceptance of the changes, which can be done through workshops, meetings, and training.

PMI®, *The Standard for Program Management*, 2017, 54

11. c. The window of opportunity remains

Benefits reviews are often held with governance in benefits delivery. They focus on strategic alignment and value delivery. In this situation, value delivery is emphasized as there is a window of opportunity to complete the program and realize its benefits.

PMI®, *The Standard for Program Management*, 2017, 52

12. d. Life cycle costs exceed the proposed benefits

The idea of a value proposition is the benefit one's customer will have from the program. However, while many benefits are worthy, some will cost more than originally planned or during the entire life cycle of the program, changes outside of the program manager's control, such as enterprise environmental factors, may make the costs too prohibitive to try to achieve the benefit.

PMI®, *The Standard for Program Management*, 2017, 52

13. b. Stakeholder satisfaction

Ideally the program manager would want to meet all of these people, but given there are over 250 stakeholders, stakeholder satisfaction is part of the KPIs.

PMI®, *The Standard for Program Management*, 2017, 51

14. a. Documents activities to achieve the program's planned benefits

There are many purposes of the benefits management plan, and it is a key document in program management. Of these purposes, it formally documents the activities needed to achieve the benefits of the program.

PMI®, *The Standard for Program Management*, 2017, 50

15. b. Guide delivery of benefits

As the baseline document, the benefits management plan guides the delivery of benefits during program performance.

PMI®, *The Standard for Program Management*, 2017, 50

16. d. Roadmap

While the program roadmap has many uses, it describes evolving aspects in the program, which include incremental benefits delivery.

PMI®, *The Standard for Program Management*, 2017, 50

17. b. Stakeholders will not accept the benefits

Benefits have both risks and opportunities associated with them regardless of the size or complexity of the program. In this situation, a risk is stakeholder acceptance since it represents a new way of working.

PMI®, *The Standard for Program Management*, 2017, 49

18. b. It is unclear whether the program will provide funds to operations

When the program ends, it may or may not provide costs to operations or the receiving organization to cover the deferred costs of these new benefits. The organization may self-fund the costs.

PMI®, *The Standard for Program Management*, 2017, 48

19. d. Identify and qualify the benefits your stakeholders will realize

This situation is the purpose of benefits identification.

PMI®, *The Standard for Program Management*, 2017, 46

20. d. Work closely with the legal, marketing, and human resources departments

Other organizations, stakeholders, and beneficiaries may not realize a benefit from a program as in this situation and may be subject to reduction in personnel as in this situation. Minimizing negative impacts is as important as realizing benefits.

PMI®, *The Standard for Program Management*, 2017, 44

Program Stakeholder Engagement

Practice Questions

1. You decided to use the Pareto principle as you work to engage stakeholders on your program to build a new liquefied natural gas pipeline. Many residents in the area are concerned about it being so close to their homes. You have held meetings with the residents in the area and have pointed out that since the program uses state-of-the art technology, they really will not know it is there. Many remain skeptical and critical. You then decided to meet with them regularly to listen to their concerns and provide feedback to them. You did so because—
 - a. You want the residents to be neutral or positive to the program
 - b. You want people to realize it will lead to an enhancement of the local economy
 - c. A two-way communication will help in benefits delivery
 - d. A two-way communication will enable more benefits to be identified
2. You are working on a complex five-year program that has a minimum of four projects under way at any given time. A major scope change to Project L has resulted in a need to rebaseline its schedule. Consequently, because of dependencies with Project L, Project D also had to revise its schedule. You have informed your Governance Board and key stakeholders about the revisions. Some stakeholders have asked questions regarding the rebaselining. Your next step is to—
 - a. Capture and publish questions and answers
 - b. Ask the project managers to meet with their key stakeholders
 - c. Hold meetings with key stakeholder groups to listen to their concerns and answer questions
 - d. Follow your defined communications strategy

3. The president of your company has selected you to be the head of all eLearning and has asked that you launch a program to develop new media for delivering your company's content. The program has a number of stakeholders, some of whom are supportive and some of whom are skeptical, and you anticipate many debates concerning the program's objectives. As the program manager, you recognize that you need to rely on—
 - a. Leadership skills
 - b. Communications skills
 - c. Environmental awareness skills
 - d. Negotiation skills
4. Your company is being investigated by members of the legislative branch of your country. It is causing the company a lot of negative publicity, and some existing customers are leaving to purchase products from competitors. Your new program for flying helicopters is under investigation, and you have been told since you are the program manager to provide the members of the investigating committee with information on your program. You believe though that since the company does not operate in countries that observe data privacy that you—
 - a. Should provide the committee with all the artifacts you and your team have created
 - b. Should ask the members of the committee if they want to interview you or anyone on your team as you believe in government 'in the sunshine' as a personal value
 - c. Should not provide the stakeholder register
 - d. Should not provide emails from personal servers
5. You and your team held a two-day off-site retreat to discuss the vision of your data transformation program so everything in the company is digital. You wanted to make sure everyone on your team of nine people dedicated full-time to your program shared the same values and also could raise any concerns or issues. You decided during the retreat to use the nominal group technique, so no one would dominate the session to brainstorm the stakeholders on your program. It was successful, and you then presented it to your program steering committee members for any other suggestions. Overall, you identified 60 internal stakeholders considering the program has four components in it and documented them in a stakeholder register. You will use this register to—
 - a. Promote buy-in to the program from these stakeholders
 - b. Ensure a team member is responsible for interacting regularly with the stakeholders to provide feedback on progress
 - c. Determine which stakeholders should be interviewed for their suggestions
 - d. Lead to effective stakeholder engagement

6. On your program, you have identified over 50 internal and external stakeholders, and have three projects in your program. Your goal is to help stakeholders to establish high-level expectations for—
 - a. Cost and schedule status
 - b. Use of resources to deliver program benefits
 - c. Program benefits delivery
 - d. Activities to determine whether specific work results have been completed
7. Meeting stakeholder expectations is vital to program success; therefore, participation of stakeholders must be monitored to ensure that their expectations are met. You are managing a large program with diverse stakeholder groups. On this program, you have found that you often need to—
 - a. Meet one-on-one with each of the 200 stakeholders on the program
 - b. Use facilitated negotiation sessions between stakeholders
 - c. Have your enterprise program management office (EPMO) take over responsibility for stakeholder expectations management
 - d. Use your stakeholder analysis chart as a key tool and technique to assist in managing expectations
8. You have been managing a complex and major program in your company, BBB. Your program has 11 separate contracts and also two projects use in-house resources. Your team is a virtual, and because of budget constraints, you could not have a face-to-face meeting. Because of the large number of stakeholders to best address the urgency of their issues, you decide to—
 - a. Hold a focus group
 - b. Set up a prioritization mechanism
 - c. Conduct an impact analysis
 - d. Determine the frequency and rate of communications on the program
9. Assume you and your team sent a questionnaire to the 200 stakeholders on your internal organizational transformation program. You decided the questionnaire, since you used open-ended questions, should be used given the large number of stakeholders. Of the 200, 125 responded and provided feedback. From the questionnaire, your next step is to—
 - a. Interview the 125 who responded to learn more about their interests and concerns
 - b. Develop a stakeholder map since the program is complex
 - c. Assign a team member to work with each stakeholder and then collectively develop a RACI chart
 - d. Recognize the stakeholder register will need to be updated once the questionnaire is analyzed

10. You realize a stakeholder engagement plan will be useful on your new program to avoid any cyber security hacking into your organization. It is a complex undertaking but is a necessity as it can completely disrupt the entire organization and provide critical information to competitors. You are determined no one will be able to penetrate your systems once your program is complete and have hired known hackers to serve as subject matter experts. Once you communicated the purpose of your program throughout the company about 90% of the people were enthusiastic; the other ten percent are the people who dislike change so much and always say no to anything new. You decided the stakeholder engagement plan would—
 - a. Show expectations for benefit delivery
 - b. Ensure stakeholder expectations are appropriately captured and logged
 - c. Consider when impact analysis should be used
 - d. Show stakeholder categories
11. Recently, your City has been experiencing numerous power outages because of excessive heavy rainfall and numerous hurricanes. Many residents have purchased gas generators, but they tend to not last long enough so people are also purchasing generators that use propane. Your propane company has decided that it should set up a program that would be put in place to use natural gas instead. You are the manager for this program. You also have a large number of interested stakeholders, and they are monitoring your progress to see if this new natural gas approach will be ready before the next hurricane season. Your goal is to—
 - a. Assess the degree to which the program satisfies needs and benefits
 - b. Set clear stakeholder engagement goals
 - c. Work to turn stakeholders who are negative about the program to be positive or at least neutral to it
 - d. Communicate actively to your stakeholders as to your progress and your program's benefits

12. You are the program manager on a highly controversial e-mail retention program for your company, AEI. More than 75 percent of the people in AEI are opposed to the program because they realize all of their e-mail messages will be archived. AEI management has informed everyone someone will review each e-mail to make sure it pertains to company business and is not a personal one. All e-mails are to be written in a professional way and must be ethical. You now have many conflicts as you and your team execute the five projects in your program. This program represents a major culture change for AEI as in the past it was common to discuss anything with anyone. Generally accepted methods of organizational change management are required for this program, and the person in charge of this change is—
- The program director
 - The program sponsor
 - The program governance board
 - You, the program manager
13. As a program manager, you recognize the importance of stakeholder engagement. To support your efforts, especially with key stakeholders whose displeasure might hinder the program's success, you prepare a stakeholder engagement plan. You know that stakeholders must see the benefits of the program. Therefore, you need to have strong skills in—
- Strategic planning
 - Leadership
 - Enterprise resource management
 - Customer relationship management
14. Each program has stakeholders. At the time you were appointed as program manager, you and your core team immediately identified 50 key stakeholders. Now the number of stakeholders has increased according to your stakeholder analysis to 88. You seem to feel as if all you do all day is communicate with stakeholders and have meetings with groups of them. The purpose of program stakeholder engagement is to identify how the program will affect stakeholders in areas such as—
- The organization's culture
 - Management of operations
 - Corporate governance
 - Legal policies, standards, and regulations

15. Assume you are managing a complex program to develop a new product before the competition to cure the eye disease of macular degeneration. The number of stakeholders who you consider critical to the program is at least 75. You try to hold meetings with them using SKYPE since you work in a virtual environment with subject matter experts scattered in nine different areas plus senior-level executives. Recently, you noted the level of participation seems to decrease with each meeting you hold. You decided you need to—
 - a. Use impact analysis
 - b. Use matrix diagrams
 - c. Use affinity diagrams
 - d. Use root-cause analysis
16. You are the program manager responsible for implementing business development magic.com, a highly complex but powerful tool for customer relationship management. You and your team have spent three days identifying the metrics against which you will measure stakeholder engagement activities. Your next step is to—
 - a. Meet with key stakeholders to gain agreement
 - b. Include the metrics in the stakeholder register
 - c. Test the effectiveness of the metrics through a focus group
 - d. Include the metrics in the stakeholder engagement plan
17. You are a program manager for a city transit authority. Your program has a number of projects under way to upgrade the infrastructure to current technologies and to implement a process improvement program. The transit authority's chief financial officer (CFO) who was your sponsor has left to assume a position in a different city, and a new person has been appointed CFO. You should—
 - a. Update your stakeholder inventory
 - b. Appoint one of your core team members to interact with the new CFO
 - c. Meet with the new CFO to explain the importance of the program
 - d. Update the stakeholder register

18. Obviously as a program manager you need to engage stakeholders and mobilize positive proponents to support you as typically many people are opposed to a program, realizing that all programs involve change to some extent, and people tend to resist change if they are affected or think they may be affected. Recently, your Agency administrator, who is committed to program and project management and wants to avoid a silo-based organization, hired an outside consulting firm to conduct a maturity assessment of the Agency's policies, procedures, and practices and make recommendations. The consultant' report noted the Agency had a very low level of maturity, and extensive work was needed to move to a program-and project-based culture. You then were appointed as the program manager. You have a team of seven people who are supporting you full time and have three components in your program. You decided the best approach was to empower your team. The team recognizes that over time recipients will adapt, but continual stakeholder engagement is needed, which means—
- a. Employees affected need empowerment in their own area
 - b. The affected groups require weekly meetings to flag unresolved issues
 - c. Sensemaking activities are needed regularly
 - d. Ongoing executive support through regular participation in every meeting is necessary
19. Stakeholders play a critical role in the success of a program or project. As program manager for development of a next-generation motorcycle to be available in 2020, you know it is a best practice to determine a strategy to engage stakeholders. This should be done—
- a. During overall program planning
 - b. While the business case for the program is made
 - c. As the program is being initiated
 - d. After the projects and other ongoing components of the program are determined

20. You are managing a program under contract with a major motion picture studio. The Statement of Work noted that you needed to interface with ten different groups of people within the studio. After your company, KSI, won this contract, you and your team recognized the importance of systematically identifying all stakeholders and stakeholder groups since stakeholder support is critical to program success and benefit delivery. This approach enables you to—
- a. Develop a stakeholder communications strategy
 - b. Prioritize stakeholders in terms of their ability to influence the program
 - c. Develop a stakeholder register
 - d. Identify stakeholders' attitudes toward the program

Answer Sheet

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
6.	a	b	c	d
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15.	a	b	c	d
16.	a	b	c	d
17.	a	b	c	d
18.	a	b	c	d
19.	a	b	c	d
20.	a	b	c	d



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Answer Key

1. c. A two-way communication will help in benefits delivery

A goal of program management is to deliver more benefits than if the projects that comprise them were managed in a standalone way. Through a two-way communication with stakeholders, it enables the program manager to deliver benefits to the organization as specified in the program charter.

PMI®, *The Standard for Program Management*, 2017, 59

2. a. Capture and publish questions and answers

It is important to engage and interact with stakeholders. As some stakeholders are curious about the program and ask questions, a best practice to follow is to capture the questions and answers to them and publish them in a way that will allow multiple stakeholders to benefit from the exchange.

PMI®, *The Standard for Program Management*, 2017, 66

3. b. Communications skills

Effective communications skills are critical in stakeholder engagement. Through communications, the program manager creates a bridge between diverse stakeholders as different stakeholders will have different cultural and organizational backgrounds, levels of expertise, and perspectives and interests, all of which may impact or influence benefits delivery to the organization.

PMI®, *The Standard for Program Management*, 2017, 66

4. c. Should not provide the stakeholder register

Because the company does not operate in countries in which data privacy regulations are the norm, you do not have to provide the stakeholder register as it may contain negative and political sensitive information.

PMI®, *The Standard for Program Management*, 2017, 60

5. d. Lead to effective stakeholder engagement

The stakeholder register lists each stakeholder across the program life cycle and is an essential tool leading to stakeholder engagement.

PMI®, *The Standard for Program Management*, 2017, 62

6. c. Program benefits delivery

Since programs are established to deliver more benefits than managing the components in them in a standalone way, you want to help stakeholders establish high-level expectations for the delivery of benefits. The program manager then provides stakeholders with information in the program charter and business case, often including an executive brief to summarize risks, dependencies, and benefits.

PMI®, *The Standard for Program Management*, 2017, 65

7. b. Use facilitated negotiation sessions between stakeholders

The program manager uses communications, negotiations, and conflict resolution skills to defuse stakeholder opposition to the program and its stated benefits. Large programs with diverse stakeholders may require facilitated sessions when expectations conflict.

PMI®, *The Standard for Program Management*, 2017, 65

8. c. Conduct an impact analysis

Stakeholder issues and concerns will address different aspects of the program. Impact analysis can be used to understand the urgency and probability of stakeholder issues and to determine whether they will be risks to the program.

PMI®, *The Standard for Program Management*, 2017, 65

9. b. Develop a stakeholder map since the program is complex

An internal transformation program is complex, and a stakeholder map visually shows the interaction of the stakeholders' current and desired support.

PMI®, *The Standard for Program Management*, 2017, 62

10. a. Show expectations for benefit delivery

As programs are established to deliver benefits to the organization through its components rather than have the components be individual projects, as the stakeholder engagement plan is developed, it should consider stakeholder expectations of benefit delivery and the degree of support to the program benefits.

PMI®, *The Standard for Program Management*, 2017, 64

11. b. Set clear stakeholder engagement goals

Successful program managers recognize the importance of stakeholder engagement. They use strong leadership skills to set clear stakeholder engagement goals for the program to address the changes that will occur on the program.

PMI®, *The Standard for Program Management*, 2017, 60

12. d. You, the program manager

Program managers are the champion for change in the organization. Each program represents some type of change, and the program manager must work with those stakeholders to overcome their resistance to change proactively. The program manager must expect change and be prepared to manage it.

PMI®, *The Standard for Program Management*, 2017, 59-60

13. b. Leadership

Stakeholders play a critical role in determining program success. Because they can help or hinder a program, the program manager needs to have strong leadership skills to work with stakeholders and set clear stakeholder engagement goals for the program and the changes it may bring.

PMI®, *The Standard for Program Management*, 2017, 60

14. a. The organization's culture

In stakeholder analysis and engagement planning, the organizational culture and acceptance of change are two key areas to address in the stakeholder engagement plan.

PMI®, *The Standard for Program Management*, 2017, 64

15. d. Use root-cause analysis

The purpose of root-cause analysis is to determine why a problem exists, as in this case lack of participation in meetings, and the reasons for it and the main root cause of the problem.

PMI®, *The Standard for Program Management*, 2017, 65

16. d. Include the metrics in the stakeholder engagement plan

The stakeholder engagement plan defines the metrics to measure the performance of stakeholder engagement activities. It includes measures of participation in meetings and other types of communications and the effectiveness of stakeholder engagement in meeting its goals.

PMI®, *The Standard for Program Management*, 2017, 64

17. c. Meet with the new CFO to explain the importance of the program

The CFO, as he or she is your sponsor, is a significant stakeholder on programs since the sponsor provides resources and support for the program and is accountable for its success. The sponsor is often the program's champion. As a new person in this role, he or she may be unaware of this program. The program manager must then spend time and energy with this new CFO to address any concerns and the program's benefits, objectives, or outcomes.

PMI®, *The Standard for Program Management*, 2017, 61

18. c. Sensemaking activities are needed regularly

People at all levels need to recognize the purpose of the program and the benefits it will bring to the organization. Since stakeholders change on programs, regular sensemaking activities are needed to explain the program, everyone's role in it, and to ensure the program's benefits are known and tied to stakeholders' needs and expectations. To do so, if there is resistance or apathy from stakeholders and/or pressure from executives to complete the program quickly, time needs to be set aside for sensemaking to address the issues to see as well if the pace of the program requires adjustments.

PMI, *Managing Change in Organizations A Practice Guide*, 2013, 82-83

19. c. As the program is being initiated

Stakeholders are persons who have an interest in or influence over the program. They may be internal or external to the organization, and their expectations must be managed from the beginning to the end of the program. Key stakeholders are stated in the program charter and should include an initial strategy to engage them.

PMI®, *The Standard for Program Management*, 2017, 57, 93

20. c. Develop a stakeholder register

The stakeholder register is prepared during Program Stakeholder Identification. Brainstorming is used to name stakeholders across the program life cycle. The register shows the stakeholder's organization position, program role, support level, influence, communications, and other considerations.

PMI®, *The Standard for Program Management*, 2017, 60, 62



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Program Governance

Practice Questions

1. Within the Acme Bearing Company, management uses the terms project management and program management interchangeably, and there is no consistency across programs. Furthermore, there is no executive support to facilitate issue resolution, no direction or leadership provided to program teams, and little control over work initiatives. As an external consultant, you have been asked to provide recommendations for improvement. You prepare a report with a prioritized list of actions for Acme management. Number one on your list is to establish—
 - a. A portfolio management information system
 - b. Enterprise project management across all divisions
 - c. Program governance
 - d. A program delivery model with supporting competencies
2. As the program manager for a new curricula of training products, you will need to work with numerous divisions within your company, many of which are located in other countries. Additionally, other projects and programs in the organization are linked to your program at various levels. Because you realize the importance of gate reviews and health checks, you need to develop a(n)—
 - a. Interface management plan
 - b. Integration plan
 - c. Governance plan
 - d. Program roadmap

3. As your organization's troubled program recovery specialist, you have been called in to take over a program that has had difficulties from the start. An initial assessment revealed that the project-level requirements had not been completed nor had those at the program level. Of course, they need to be finalized before work can be done. You also found that even though your program management methodology requires a program steering committee for a program of this magnitude that none had been set up. You realize this is a necessity, and phase-gate reviews must be conducted. The governance processes, procedures, and templates for programs are defined and managed by the—
 - a. PMO
 - b. Program office
 - c. Program manager
 - d. Program steering committee
4. Assume you now have a program steering committee set up for this troubled program that has had difficulties from the start. You worked with your core team and developed program-level requirements. When you inherited the program, you learned it already had three projects, so you have had your project managers define the project-level requirements succinctly. You have been working with the project managers now on overall program planning and also on planning for their projects. You are scheduled now to meet with your program steering committee in two weeks for a decision-point review, which will focus on—
 - a. Obtaining customer support for your work to date
 - b. Ensuring the customer acceptance criteria for the end products of the program will be met as planned
 - c. Assessing actual versus planned benefits realization
 - d. Assuring the ability to sustain program benefits in the long term
5. The program steering committee on your program is considered to be the best in the organization because of its approach to monitoring performance. Not only do its members monitor progress reports on a routine basis, but they also specifically employ the best practice of—
 - a. Meeting with you quarterly to discuss status
 - b. Conducting client satisfaction surveys to determine whether quality is being achieved
 - c. Hiring an outside consultant to monitor progress reports to get an objective view
 - d. Assessing possible changes to the program's planned approach

6. You have been managing a program to run the clinical trials for a new class of drugs that will forever eliminate prickly heat in the subtropics. Partway through the trials, you discovered that a competitor had already achieved regulatory approval to begin manufacturing and selling an identical class of drugs that will be sold at half the cost of the drug that you are developing. You met with your program steering committee to discuss the situation. The next step is to—
 - a. Prepare a program closure recommendation
 - b. Conduct an audit
 - c. Prepare a performance report
 - d. Terminate the program
7. Assume you established a program steering committee for your program to review all the regulations in your government agency as mandated by your government and see which ones were outdated and could be eliminated and others that should be modified if they were retained. The steering committee has approved the approach you plan to use on this program, and it has authorized the resources you requested. In doing so, its members reviewed—
 - a. The program management plan
 - b. The benefits delivery plan
 - c. The program charter
 - d. The stakeholder engagement plan
8. Assume you just joined a new company and were hired because you have your PgMP. You were surprised to learn that it had standardized reporting and control processes for its programs as you had to put them in place at your previous company. You especially were surprised these reporting and control documents included—
 - a. Strategic alignment
 - b. Issue escalation criteria
 - c. Constraints
 - d. Strategic and operational assumptions

9. Your company is known to be risk adverse. However, each year its share of the farm equipment market has decreased as it continues to make minor adjustments to existing products, while the competition is focused on new products at reduced prices. Your CEO asked you to lead a program to develop a completely new product line that would include use of unproven robotics technology, so operators would have minimal, if any, need for involvement. The new product line has six components, and your work is kept completely secret, so the competition is unaware of what you are doing. Every member of your team has signed a Non-Disclosure Agreement, and the CEO is heading the program steering committee. This means that—
- The steering committee has established a new risk threshold
 - You must ensure there is the ability to acquire all the resources you need
 - Since the program is secret, it definitely does not align to any strategic goals
 - Issues and risks will be able to be resolved quickly
10. You are the program manager for your city's initiative to put all electrical, cable, and telephone lines underground to prevent outages during tornados and hurricanes. You have a number of subcontractors working for you, and you also have a small core team of five people. So far, you have four projects in your program, but given its complexity, you expect to have more as the program ensues. You are getting ready for a review by your program steering committee for your program. One purpose of this review is to—
- Request approval to initiate another project into the program
 - Manage the program resources
 - Identify needed training for your program team members
 - Prepare for an external audit by the City's Finance Director
11. You are the program manager on a highly controversial e-mail retention program. More than 75 percent of the organization is opposed to the program because it means that all their e-mail messages will be archived and reviewed for inappropriate, unethical, or illegal statements. You know that there will be many conflicts as you and your team execute the component projects. You inform your team that, in the case of any conflict, the first point of escalation is—
- The program director
 - The program sponsor
 - The program Governance Board
 - You, the program manager

12. Although your company has been active in project management for many years, it is relatively new to program management. One of the executives knew about the usefulness of governance and stage-gate reviews from his previous work in new product development, and he recommended all programs have a program steering committee. Since the company is following the Project Management Institute's guidelines, this committee approves each program's approach. To do so it—
- Reviews the business case
 - Ensures the PMO sets up consistent process that each program follows
 - Approves the roadmap
 - Follows the governance plan
13. Although your company has been active in project management for many years, it is relatively new to program management. You became certified as a PgMP® and suggested to your supervisor that two of your current projects would be better managed as a program. Your supervisor in turn met with some members of the executive team, and collectively, they realized a number of the existing projects in the company would be better handled through a program structure. One of the executives recommended all programs have a Governance Board. The recommended governance structure is stated in the—
- Program governance plan
 - Program management plan
 - Benefits realization plan
 - Business case
14. You realize in project management the importance of quality, but as you now are managing programs, its importance does not seem to be that high. However, in your company responsible for sensor products for heating and air conditioning systems, lately customers have been complaining they are defective. Your CEO now is taking customer complaints seriously as he has implemented a customer-centric approach in the company. You are the program manager for a new line of sensors, and they are to be defect free as their number one goal. Your CEO meets with several key customers, and the next meeting is in two weeks. You are at that time to have information available for him to present as to how you will manage this program. You have established a program steering committee comprised of C-level people, and they have—
- Asked you how you will ensure there will be no defects
 - Defined metrics for program-level quality control and quality assurance activities
 - Invited the head of the Quality Department to join the governance board
 - Provided two experienced quality subject matter experts to be assigned to your program full time

15. Assume you are the program manager for your construction project to develop electrical and internet services in the far northern part of the hemisphere. While there are few residents, they need the internet to connect with the rest of the world. Enhanced electrical power is required that will continue to work in sub-zero blizzard conditions. This program is to last three years, and as the program manager, you are outsourcing about 75% of the work. Today, you learned the logistical company responsible for supply chain management has gone out of business. You and your team depend on this contractor's work, and it is imperative to locate a replacement contractor as soon as possible. The contractor's work is valued at approximately \$300 million US. In terms of requesting this change, as the program manager you should—
- Meet immediately with the Procurement Department and review the qualified vendor list
 - Approve the change and have your team member overseeing this contractor locate a replacement quickly
 - Inform your customer of this problem and get your customer involved in contractor selection
 - Request a meeting with your program steering committee
16. You are the program manager for a new version of an 8G phone. The phones are manufactured by third-party companies operating plants in five countries. You have a project manager on site in each of these five countries and a total of seven projects in your program to date. Your company is working diligently to be the first to market with these new phones as they are using the latest technology, and it differs significantly from that of the competition. You have a program steering committee for your program and it supports program success by—
- Ensuring goals are aligned with the strategic vision
 - Setting key performance criteria for the program and project managers
 - Setting up a PMO for direct program support
 - Establishing the benefits the program is to deliver

17. You are the program manager for the development of a new approach for propane generators since they are used throughout different parts of your country. The idea is that the generator will not need any interfaces to electrical power and can last for more than a month at full strength without the need for additional propane. Your company is using program management more frequently as it realizes the benefits associated with it but operates with a balanced matrix structure. You meet regularly with members of your program steering committee for periodic health checks which provide the committee an opportunity to—
- Formally review program performance
 - Assess progress toward benefit realization and sustainment
 - Focus on the phase that was just completed to determine whether the next phase should begin
 - Review and approve required program changes
18. Finally, after managing programs for over ten years, you are pleased to be a member of a new program's steering committee. This new program is to review all dietary supplements to ensure they are generally recognized as safe as a rumor is they may soon be subject to federal regulations. This program is designed to last at least two years. When you had your first Committee meeting, the four other members elected you its chair. You are honored and determined to make the Committee an effective one. Therefore, since it is a complex program, you plan to hold decision-point reviews and are scheduling one each month. For the first one, you asked the program management team to assess the risks the program faces because—
- You do not want any of the risks to turn into issues
 - You know program managers like to escalate risks to governance for resolution and want to empower the program manager instead
 - You want to ensure the level of risk remains acceptable
 - You want the steering committee to resolve all the risks since they may involve other programs and projects that are in progress

19. You are preparing for a major review by your program's steering committee. They are especially interested in progress on Project A, because it sets the stage for two other projects. Your program control officer informs you and the committee that Project A has a pessimistic estimate of being completed within 136 days, a most likely estimate of 121 days, and an optimistic estimate of 116 days. They are concerned that the pessimistic estimate will occur and are therefore considering—
- Recommending that this component be terminated since it cannot meet its schedule
 - Adding resources to Project A
 - Working collaboratively with the program manager to determine needed changes
 - Requesting a program audit
20. You are the program manager for an autonomous car, and it is considered the number one program in the company's portfolio. As it is using state-of-the-art technology, people competed to be on the program and for the program manager position, and you were pleased to be selected. Today, your CEO announced your company is being acquired by another automotive company. You have heard this company has a similar program under way as all automotive companies, plus others, are striving to be first to market. You asked your program's steering committee for assistance to learn whether your program would be eliminated and that of the acquiring company to be retained. Your steering committee has been conducting reviews every other week since the program began. A key role therefore of the steering committee is to—
- Prepare you and the team for adaptive change
 - Determine the current situation at the other company
 - Merge both products for a more complete solution
 - Point out to your CEO the progress to date to better influence the new portfolio manager

Answer Sheet

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
6.	a	b	c	d
7.	a	b	c	d
8.	a	b	c	d
9.	a	b	c	d
10.	a	b	c	d

11.	a	b	c	d
12.	a	b	c	d
13.	a	b	c	d
14.	a	b	c	d
15.	a	b	c	d
16.	a	b	c	d
17.	a	b	c	d
18.	a	b	c	d
19.	a	b	c	d
20.	a	b	c	d



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Answer Key

1. c. Program governance

Program governance is the framework, functions, and processes to monitor, manage, and support a program so it meets organizational strategic and operational goals.

PMI®, *The Standard for Program Management*, 2017, 67

2. c. Governance plan

The governance plan describes the systems and methods to monitor, manage, and support a program and the responsibilities for ensuring timely and effective use of the systems and methods.

PMI®, *The Standard for Program Management*, 2017, 70

3. a. PMO

As part of its oversight, the PMO facilitates governance practices. It standardizes the program-related governance processes and focuses on sharing resources, methodologies, tools, and techniques. It provides professional expertise in applying program governance practices

PMI®, *The Standard for Program Management*, 2017, 82

4. c. Assessing actual versus planned benefits realization

Program governance endorses reviews at key decision-points in the program's life cycle. Among other items, these reviews assess outcomes of component activities to assess the actual versus the planned realization of program benefits and to then determine if the program plan needs to be adapted based on the outcomes of the review.

PMI®, *The Standard for Program Management*, 2017, 75

5. d. Assessing possible changes to the program's planned approach

One responsibility of the program steering committee is to establish thresholds for changes the program manager can make on his or her own and determining when a change requires further discussion. Though its monitoring, reporting, and controlling functions, the members of the committee are in a position to evaluate whether the proposed change is one that requires changes to the program's planned approach or activities.

PMI®, *The Standard for Program Management*, 2017, 74

6. d. Terminate the program

This situation is an example in which the program steering committee would terminate the program because of changes in the environment eliminated the need for the program to continue.

PMI®, *The Standard for Program Management*, 2017, 78

7. c. The program charter

The program charter authorizes the program management team to use organizational resources to pursue the program and links the program to the business case and the organization's strategic priorities.

PMI®, *The Standard for Program Management*, 2017, 72

8. d. Strategic and operational assumptions

The Program Management Standard lists 11 different documents. The only one that it lists in this question is strategic and operational assumptions.

PMI®, *The Standard for Program Management*, 2017, 73

9. a. The steering committee has established a new risk threshold

The CEO is leading the steering committee and understands the company's risk appetite. Therefore, this steering committee can establish new risk thresholds for the program.

PMI®, *The Standard for Program Management*, 2017, 73

10. b. Manage the program resources

Decision-point reviews are endorsed by program governance, and they may include assessing program resource needs and organizational commitments as well as capabilities to fulfill them.

PMI®, *The Standard for Program Management*, 2017, 75

11. d. You, the program manager

Program managers are the first escalation point for issues, changes, risks, interfaces, and dependencies from component managers and teams.

PMI®, *The Standard for Program Management*, 2017, 73–74

12. a. Reviews the business case

Program governance approves each program's approach and its plan to pursue program and organizational goals. It also authorizes use of resources by the program. These approvals occur early in the program definition phase and are facilitated by reviewing the program's business case and the program charter.

PMI®, The Standard for Program Management, 2017, 72

13. a. Program governance plan

Among other items, the program governance plan describes the structure and composition of the people who will be on the program steering committee and defines who will have accountability and authority for key decision making and responsibility boundaries.

PMI®, The Standard for Program Management, 2017, 70

14. b. Defined metrics for program-level quality control and quality assurance activities

Quality and its governance is paramount to program success. Therefore, the steering committee has responsibility for reviewing and approving the quality management approach, and it also defines measures including those to review program-level quality control and assurance activities.

PMI®, The Standard for Program Management, 2017, 74

15. d. Request a meeting with your program steering committee

A change of this magnitude in terms of financial obligation would be escalated to the program's steering committee as it is doubtful the program manager would have delegated procurement authority to act on his or her own.

PMI®, The Standard for Program Management, 2017, 74

16. a. Ensuring goals are aligned with the strategic vision

Program governance supports program success in numerous ways, one of which is to ensure the program's goals remain aligned with the strategic vision, operational capabilities, and resource commitments of the sponsoring organization.

PMI®, The Standard for Program Management, 2017, 69

17. b. Assess progress toward benefit realization and sustainment

Periodic health checks are held between decision-point reviews and enable the program steering committee to assess ongoing performance and progress toward benefit realization and sustainment.

PMI®, *The Standard for Program Management*, 2017, 76

18. c. You want to ensure the level of risk remains acceptable

Each organization has its own risk appetite and threshold for risk. A role of governance is to ensure the level of risks in the program remains acceptable to the organization's threshold for risk.

PMI®, *The Standard for Program Management*, 2017, 75

19. c. Working collaboratively with the program manager to determine needed changes

Establishing a collaborative relationship between the program steering committee is critical to success. The program manager has the responsibility and authority to manage the program as authorized by the steering committee.

PMI®, *The Standard for Program Management*, 2017, 78

20. a. Prepare you and the team for adaptive change

Program represent change, and everyone naturally resists change. However, an organization's strategic priorities may change during the life of a program. A program steering committee is invaluable to initiate recommendations for adaptive change to the program's strategy as required so it can pursue and deliver its intended benefits.

PMI®, *The Standard for Program Management*, 2017, 76

Practice Test 1

This practice test is designed to simulate PMI®'s 170-question PgMP® certification exam. You have four hours to answer all questions.

INSTRUCTIONS: Note the most suitable answer for each multiple-choice question in the appropriate space on the answer sheet.

1. Assume you are working to change the culture of your organization to one that views its programs and projects as strategic assets and critical to overall success. You have been working on a team to define the long-term objectives of the organization and to set forth vision and mission statements for employees that are meaningful and informative. In your efforts you and your team has agreed that one of the indicators of the organization's risk tolerance is found in its—
 - a. Business case
 - b. Portfolio
 - c. Strategic plan
 - d. Program charter
2. Your team is located on three continents. Many team members are struggling to use the new project and portfolio management (PPM) system, and training is required. You have a PPM expert on your staff, and the PPM vendor also offers training courses. Team members work six days a week. You are to complete your program in three years and now are in year two as your program management plan was approved after six months. One of your five components has finished its deliverables and realized its benefits. Now, you should—
 - a. Redeploy your resources from this component to the other four in your program
 - b. Prepare a final report on this component to give to your program steering committee members
 - c. Work with your sponsor to transition this component
 - d. Work with your component manager to close the program

3. You are managing a program to develop a new source of energy in the extreme northern latitudes when solar power is not available. You have a core team and a Program Management Office to support you and the nine projects that are under way. However, your power company, DCE, is resource constrained. You are finding it difficult to obtain the key subject matter experts you need for this important program. You have been working diligently with your stakeholders to gain their support as you know stakeholder engagement is critical to program management. Your approach is to have effective and ongoing communications with your stakeholders. You have prepared a communications management plan for your program, and it has been approved by your sponsor and Governance Board. To complement this plan, you should prepare a(n)—
- Stakeholder register
 - Information distribution plan
 - Communications log
 - Knowledge management plan
4. Assume your organization submitted its proposal to government agency ABS. One requirement was that the program manager be certified as a PgMP®. You were listed in the proposal as the program manager and plan to take the exam in three weeks; there is plenty of time as it is June 1, and the contract is not to be awarded until July 1. Your company is convinced it will win this opportunity, and you are working on the charter. Your company won the contract, but your PgMP test date was pushed out until August as the testing center was full in June. You should—
- Complete the charter so the program can commence
 - Hold a kick-off meeting with your team
 - Inform your sponsor about the testing center issue
 - Inform the ABS point of contact about the testing center issue
5. You are preparing for a meeting of the program steering committee for your program. Committee Member A told you in a pre-meeting that she believes some recent issues were not in line with your benefits management plan. She also says that the level of risk in your program is unacceptable. She plans to request a change during the Committee meeting. Your best course of action is to—
- Review your benefits register and resolve any issues
 - Update your benefits management plan and present the revised version at the Program Steering Committee meeting
 - Proceed as planned with your meeting, as other Committee members have not expressed any concerns
 - Recognize it is a role of the Committee to endorse or approve program changes

6. Assume you are on a selection committee to determine which programs and projects your organization should undertake in the next year. Resources in terms of both people and funding are major constraints. One program is for an organizational change program in which for one project in this program, its output is a new personnel information system, with an outcome a new resource management and compensation policy, which is documented in the—
 - a. Benefits realization plan
 - b. Business case
 - c. Program goals and objectives
 - d. Program management plan
7. You are excited because upon achieving your PgMP®, you have been assigned to manage a program in your motorcycle company, BCD, to design the 2025 program of vehicles to be produced. Each motorcycle is to be able to be used without helmets. Also, the motorcycles must have other safety features to make sure even in heavy traffic or inclement weather that the rider is protected, and the motorcycle must be able to travel for at least 800 miles without the need to refuel. You just prepared your benefits management plan for this program. It will be helpful because—
 - a. Your performance plan is tied to the benefits realization plan through the balanced scorecard approach
 - b. The benefits management plan will involve all the key stakeholders in the program to get their buy in to the program
 - c. You and your team can monitor the agreed-upon benefits until the program is completed
 - d. It specifies methods to put in place so the benefits are fully realized
8. On your motorcycle program, you and your team are actively tracking the benefits identified in your plan. Your Governance Board asked you to revise your plan after they saw that there were so many intangible benefits and asked you to also include more tangible ones that were easier to track and then report to your stakeholders. You made a strong case for retaining your intangible benefits as you also felt the plan was useful as it—
 - a. Serves as a baseline to guide the delivery of benefits
 - b. Was prepared through a brainstorming session with some of the key stakeholders who then would question why some of the intangible benefits were omitted
 - c. Helps to better define the specific project deliverables
 - d. Was set up in a fashion that all the benefits would be realized incrementally

9. You are the program manager for your city's initiative to put all electrical, cable, and telephone lines underground to prevent outages during tornadoes and hurricanes. As program manager, you will select subcontractors to support your program. You prepare criteria for the make-or-buy decisions, as well as the criteria to select the subcontractors—
 - a. See how much cheaper it is to buy rather than to make
 - b. See how much cheaper it is to make rather than to buy
 - c. Outsource as much as possible in accordance with company policy
 - d. Determine the optimal procurement options based on a wide variety of factors
10. Because your program has the highest priority in the organization's portfolio, your program steering committee meets each month, and each member receives a weekly status report. The executive sponsor requests these reports to enable him to stay current on program activities and assist you with any issues that need resolution. Your customer also requests monthly meetings and a weekly teleconference. These are key stakeholders, which means, you should develop a(n)—
 - a. Communications log
 - b. Information distribution plan
 - c. Communications capability matrix
 - d. Communications strategy
11. Assume your executive management team has requested that a standard process be put in place for a business case for new programs and projects to pursue in the organization. You are the leader of a cross-functional team that is designing this process. Your executives have stressed they wish to analyze each proposal from multiple business perspectives and want a balanced view of the business opportunity to be realized as well as the business risk to do so. The first step in this generic process should be to—
 - a. Determine the key milestones in the program
 - b. Define the high-level requirements
 - c. Prepare a feasibility study
 - d. Analyze program complexity and strategic alignment

12. You are managing a program with a long duration for the water management district in your county. At this time, it is scheduled to last nine years, but you believe the timeline could even be longer. You have seven projects in your program at this time, and you are only in year two. You and your program management team need to analyze any environmental or legislative changes during program delivery that may affect your program. This is a key activity to perform during the—
- Benefits Identification phase
 - Program Financial Management
 - Program Setup phase
 - Program Risk Monitoring and Control
13. Assume you are new to your government agency, which is responsible for food safety. You are working on a program to determine whether camel milk is safe and should be approved for production and exported to other countries. You also need to determine the type of testing methods to be used to assess the safety of this milk. There are three components in your program. This agency recently changed its organizational structure to move from a silo approach in most cases so cross-functional teams could easily be formed. When you were appointed program manager for this camel milk program, you knew there will be many changes since you have a number of key stakeholders involved – the staff at the agency, the staff at its parent organization, the camel milk industry, testing manufacturers, consumer groups, and regulatory officials. Therefore, once your charter was approved and your core team was in place with four people, you decided to—
- Set up a process to include interested stakeholders in your program at regular milestones for buy in
 - Establish a change management process
 - Determine the role of governance for your program to present to the Agency Administrator
 - Establish a group for scientific experts to assist you and serve as subject matter experts
14. You are a program manager for a software services company. This new software will bring your company into Cloud computing. It also will replace your company's legacy finance and accounting systems. You are now preparing your program's scope. You should use the—
- PWBS
 - Program charter
 - Business case
 - Financial framework

15. Assume your program for the next generation software to ensure there are no cyber security attacks in your country passed its last phase-gate review and now is in the program delivery phase. It is the longest phase of your program, but you need to compress it to ensure cyber attacks do not occur. The program has five components. You have determined that one way to shorten the time requirements is to—
 - a. Stagger the benefits realization time
 - b. Have a variable release with essential parts of the program completed quickly
 - c. Approve all five components at one time
 - d. Have the program benefits delivered when the program is ready to close
16. On your motorcycle program, you and your team are actively tracking the benefits identified in your benefit management plan. You found, though, that employee satisfaction, which was in the first plan, was not really useful so you decided to delete this benefit and not track it. Now, you have a new plan in place. This means you should—
 - a. Begin a process to revise your benefit report and benefit register
 - b. Update the roadmap
 - c. Discuss the new plan at your upcoming, regularly planned program status meeting with your program steering committee in two weeks
 - d. Distribute your plan to your key stakeholders
17. Assume your company has fully embraced program management. It has recognized its value and has changed its Project Management Office into an Enterprise Program Management Office. You are the Director of this Enterprise Program Management Office and report directly to the CEO. You have a program life cycle, which is followed, and you and your team developed a standard but scalable program management methodology. You also have set up a process where each program has a program steering committee with phase-gate reviews. Such an approach—
 - a. Enables a focus on program continuation
 - b. Ensures the program sponsor makes all final decisions
 - c. Enables a focus on changing strategies
 - d. Requires monthly meetings for increased effectiveness

18. Assume you are the program manager for a program to help your government become a member of the Asian Union, which will be set up similarly to the European Union. You know this will take some time to achieve so you have—
- Prepared a funding framework
 - Prepared a roadmap
 - Assessed costs and benefits
 - Focused on business value
19. Even as all the five program managers know in your company, it tends to be impossible to ensure the allotted budget will be sufficient given the resources required and the cost of each one. Your company hired a subject matter expert to assist in developing cost estimates, who is certified in the field, but it seems whenever a budget is completed, it is exceeded. This means during your program, you—
- Should use earned value to forecast estimates at completion and the budget at completion
 - Should prepare and follow a detailed financial management plan
 - Repeat the program formulation phase regularly
 - Ask the Chief Financial Officer to chair your program steering committee
20. On your program, you are continually spending the majority of your time communicating with stakeholders at all levels and in varying locations and coordinating activities. You also are preparing a number of status reports for different stakeholder groups and for your program steering committee with its numerous program reviews and more rigorous stage-gate reviews. Working as a program manager, you recognize the key distinctions between a project life cycle and a program life cycle. One of these distinctions is—
- Some projects may need to be integrated with others to provide program benefits
 - The life cycle assists in the control and management of the project deliverables
 - Programs have a distinct life cycle that is not extended
 - The way the life cycle is set up means that project benefits cannot be realized immediately

21. You established components as part of your charter and showed how they would be configured to meet the program's outcomes. Looking at the construction program you are managing, you can already anticipate that a number of changes will occur during the six years in which the program is to be completed. You are concerned because your construction site, where you will be located is in a remote area, and your sponsor and steering committee members are located in the headquarters office of your company. You know some of the changes will be minor ones and will be ones that can be managed quickly, while others may affect other work in the company and wonder how long these will take if you need to ask for assistance. Your best course of action is to—
- Work with your sponsor before you are deployed to the site and set up a process to follow
 - Determine a change classification system with level 1 changes being ones you can approve on your own
 - Set change thresholds in your change management plan
 - Set regular times in which you can access your program steering committee quickly
22. Assume you are managing a program to put in place a management-by-program culture into your global financial organization. You realize there are not that many in this worldwide corporation that possess actual experience in program management. But, your first program will be in the area of portable financial transactions by any type of device—a phone, PDA, tablet, eReader, or computer. You recognize that with this program an expert in your corporation will be needed by two of the projects in the program at approximately the same time. Both project managers have included this person in their resource management plans, resource assignment matrices, and project schedules. This is an example of—
- An assumption
 - A constraint
 - The need for you to determine how to allocate this key resource
 - An issue to be resolved by the program steering committee
23. One of the projects in your program has reported actuals to date of \$1 million against a planned value of \$500,000. You suspect that the project will run out of money soon. If it runs out of money, it will place financial constraints on your other projects and also on the entire program. Therefore, as the program manager for this program, you should—
- Prepare a program operational cost estimate
 - Issue a request to terminate this project
 - Hold a presentation
 - Calculate the schedule performance index (SPI) to see how far behind schedule you are

24. You work as a program manager for a medical device company. Extensive clinical trials are typically managed as individual projects during and after product development. This is done to assess any flaws in the products before they are submitted for regulatory approval. As a program manager, you recognize that—
- You must define the life-cycle phases for each of these projects
 - It is useful to set processes that can be applied across phases
 - The purpose of your program life cycle is to produce deliverables
 - Each project should have a different life cycle to ensure that there are no problems with the devices that are being manufactured
25. Recognizing the usefulness of a benefit map to classify stakeholders into groups, another approach to consider is a benefits breakdown structure. Its overall objective is to—
- Prioritize stakeholder objectives
 - Model the stakeholders' expected benefits
 - Reach agreement with stakeholders on critical success factors
 - Use sensemaking such that stakeholders understand the reason for the program and their involvement in it
26. You are the program manager for a proposed program to be presented in two weeks for approval from your Portfolio Review Board in your automotive company, ABC. Your program is to develop a next generation vehicle that will not require gasoline, ethanol or electricity as it will use solar power even in parts of your country that rarely see the sun. In your presentation in your business case, you want to differentiate this product. To do so, you should first—
- Demonstrate an understanding of the needs of the customer
 - Define the program success criteria
 - Describe the business opportunity
 - Analyze program risk
27. Assume you are managing a program for the National Oceanic and Atmospheric Agency in your country. Scientists in it have been doing extensive research on global warming and have noted that the current warming of the world's oceans can cause serious diseases in the next three years. You and your team prepared a benefit delivery plan. This plan is one of the key documents that now are being used by your Governance Board members to—
- Determine specific projects to pursue in the program
 - Present the business case for the program to the Agency Administrator
 - Determine whether changes are required to components
 - Determine the Governance Board's roles and responsibilities

28. Assume a new program to increase the use of social media in your engineering company was approved by the Portfolio Review Board. A number of people have expressed interest in managing this program. The program manager should be—
- The person with the knowledge, skills, and competencies best suited for the position
 - An individual who has attained the PgMP® and has excellent interpersonal skills in engaging stakeholders
 - Appointed by the Portfolio Review Board members
 - Assigned by the program sponsor
29. In your program to manufacture a new series of vehicles for the 2021 year, you initially thought you would have seven components. As you worked to develop your program charter, however, you now know you will need instead 15 components. You have prepared a business case for each of these components, and now since your program management plan has been approved, the program delivery phase is under way. As the leader, you are accountable for the program's success in delivering its benefits as promised. A key personal competency in this area is to establish and communicate your program's vision, mission, and strategic value, which is shown by—
- Meeting notes from team members showing you are acting on their behalf
 - Ensuring team members have a clear understanding as to how their work contributes
 - Applying lessons learned to current program issues
 - Aligning personnel aspirations to available roles
30. So far, you have three projects identified in your program to manufacture the new series of autonomous self-driving vehicles. However, you are only in year one of this program. You recognize that at the program level, your role involves exploiting and embracing change. Also, at the program level, analysis of change requests involves identifying, documenting, and estimating the work that the change would entail. In addition, as program manager, you must—
- Document the rationale for the decision
 - Meet with the program steering committee for approval, rejection, or deferral of the request
 - Convene a meeting of the project's configuration control board
 - Prepare a status report

31. Finally, the autonomous, self-driving vehicle program is almost complete. As an experienced program manager, you know it is a best practice in program management is to identify and document lessons learned throughout the program as it moves through the various phases of its life cycle. The next step in this process is to—
- Formally document these lessons learned in the knowledge management system
 - Have experts examine each one to determine whether it should be included in the organization's process asset library
 - Make them readily accessible for continuous learning
 - Appoint one of the core program team members as a knowledge broker to pass on these lessons learned
32. You are responsible for developing a new on-line system for purchases with delivery in less than three hours in your grocery stores, which have not operated in this fashion at all. It represents a culture change for the company since it has almost 1,000 stores in the country. Many fear they will lose their jobs because of this program, and you must complete it in a year to outpace your competition. You recognize that even though the program management plan and roadmap document the program's intended direction and benefits, you—
- Should meet with customers to obtain a profile of their buying habits
 - Realize the full suite of components may not be known
 - Need to conduct market research to see what your competitors are offering
 - Must focus your own day-to day work by helping component managers
33. Assume you are working as a program manager under contract to the company developing the advanced computers and tablets for the consumer market. Even though you believe you have a good working relationship with the program manager at the printer company, your client has not paid its last invoice of £500,000, and it is now more than 90 days overdue. Your company's accounting policy states that any invoice that is more than 90 days late becomes bad debt. You now need to—
- Rebaseline your budget
 - Update your cost management plan
 - Take corrective action
 - Issue a change request

34. Risk management is continual in program management. It is important in the early stages, even when approval to authorize a program has not yet been obtained. Assume you are the sponsor of a possible new program in which all asphalt on your nation's highway system would be totally replaced with a new product that would never require any maintenance. However, obviously there are going to be risks with such a new product to be developed, and you need to identify some of them to obtain approval to proceed. Therefore, a key question to be able to answer when you request approval to proceed is—
- What are the assumptions that are part of your analysis?
 - How much do we need to set aside for contingency in our budget should the risks occur?
 - How will these risks affect the ultimate sustainability of the product?
 - What is the probability of success for this program?
35. Working to prepare the business case for your proposed program to develop a new product to replace asphalt on your nation's highways so maintenance will not be required, you realize the members of the Portfolio Review Board will be interested the program's benefits and conduct a cost/benefit analysis. You should—
- Identify only financial benefits
 - Identify risks to achieve the benefits
 - Identify intrinsic and extrinsic benefits
 - Identify high-level benefits
36. Although you have managed programs for years in your aerospace and defense company, you also want to continuously improve your success rate in terms of benefit delivery. Therefore, you recognize the importance of active stakeholder engagement for success. You are focusing on some key competencies in stakeholder engagement, and one is to make greater use of objectivity to build consensus among your stakeholders, which given the nature of your work with diverse stakeholder groups who have an interest in or influence over your programs is a major challenge. Yet, you know it is necessary, so you decided to focus on it as one of your performance criteria this year. One way to demonstrate consensus building is to—
- Invite subject matter experts to participate in meetings
 - Correspond with biased team members to show how you explained and demonstrated the value of the program's outcome
 - Provide evidence of stakeholder engagement with meeting minutes
 - Use the organization's newsletter and informal channels of communication to keep stakeholders interested

37. You are pleased to be appointed as the Program Manager for the development of a new ballpoint pen program. This pen will never need replacement and is to be physically appealing and available in a variety of colors. It also is to be fun to use but practical for those in a business setting. Therefore, you are developing a series of these pens, and so far the program is considered to be on track. Your only key issue is that each of the stakeholders on this next-generation ballpoint pen program has different communications needs. To ensure each stakeholder receives the appropriate information he or she needs in a useful format and in a timely manner, you ask a core team member to prepare a(n)—
- Lessons-learned process
 - Stakeholder register
 - Information-retrieval system
 - Information-gathering system
38. As the program manager for a new line of children's toys, because your requirements tend to be constantly changing and some key subject matter experts have been reassigned, you realize that you already are in a position in which a portion of your budget may be depleted, and you are not yet to the halfway point of your program. Some of the toys do not pass inspection. You are becoming concerned. You need to therefore consider—
- Submitting component transition requests to your program steering committee
 - Requesting a quality assurance audit
 - Formalizing a quality policy
 - Reviewing and updating the financial management plan
39. One of your project managers (Project Manager A) has identified an issue that has implications for three projects (A, B, and C). You met with this project manager and concurred with her estimate of the importance of the issue. You then convened a meeting of your program steering committee to determine the best way to resolve it. The steering committee decided that proposed Project B is not required, and existing Project C should be terminated. It decided to add Project D. Your next step should be—
- Revisit and update your program documentation as required
 - Inform the client of this issue and its impact
 - Meet with all the project managers and the core program team to discuss next steps
 - Officially recognize and reward Project Manager A for bringing this issue to your attention

40. Assume you have a program steering committee overseeing your program in your government agency. It is comprised of the top executives and political appointees as the program is ranked in the top five in the portfolio. You have had to reduce some of the features in the scope originally planned for your program deliverables because of funding cuts. The steering committee must consider—
- How corrective actions were applied
 - Whether the window of opportunity was compromised
 - Actual resource use versus that projected
 - The number of issues escalated to you, as the program manager, and their effect on other aspects of the program or other programs in the agency
41. You are the program manager for a ninth-generation cell phone product. A number of component projects are associated with this program. You were on the core program team for the eight-generation phone, so you can apply the lessons learned from that program. The schedule is the dominant constraint, and there is a chance that you will miss the user-acceptance test milestone even though it is six months away. Your next step is to—
- Implement your plan
 - Inform the executive team that you will miss this critical milestone unless preventive action is taken
 - Revisit the program master schedule
 - Ask your program steering committee for additional resources to ensure that you can meet the milestone
42. Programs are done for customers, either internal ones or those who are external to the organization. Regardless, the program creates business value for either group. Assume you are the program manager for a new administrative system at your hospital such that patients will only need to provide their information one time rather than providing the information multiple times to different people. The patients then are the program beneficiaries, and you plan to involve them as you design and implement the system. However, the sponsor is paying for your work and is the COO of the hospital. Often you find the stakeholder groups have different views of the program objectives. The best approach as a program manager in working with sponsors and users is to—
- Realize the sponsor is the key stakeholder and work activity to engage him or her in the program
 - Convene sessions of the users to listen to their concerns
 - Be a facilitator between the two groups
 - Be alert to change requests from the users

43. Your company has been the leader in Segway® production since they were first made available to consumers. However, their popularity has increased tremendously since the product was first offered, and they are less expensive to manufacture. Therefore, sales have increased dramatically. However, recently your company has been getting a large volume of customer complaints as the battery life is only 20 miles. You have been appointed as the program manager to develop a new line of Segway® products in which the battery life will be 1,000 miles, yet the production process still will be one focusing on lean manufacturing, so the products can be offered to customers at a reasonable price. To document the relationship between the program activities and expected benefits, you have prepared a—
- Roadmap
 - Charter
 - Benefits realization plan
 - Statement of the program's goals and objectives
44. Assume your company has fully embraced program management. It has recognized and has set up a process where each program has a program steering committee with phase-gate reviews. Working with program managers, members of the committee can monitor progress to maximize program success. Obviously, changes will occur. The steering committee is responsible for—
- Maintaining documentation about the changes and their resolution
 - Defining changes the program manager can resolve
 - Serving as the program's configuration management board
 - Assessing risks with possible changes
45. As the program manager for the development of the next-generation catalytic converter, you have several major challenges. First, it is the first program in your company, second, it is highly complex, and third resources are limited. To handle these challenges you plan to—
- Assign program roles and responsibilities
 - Establish an easy to use and comprehensive program management information system
 - Set up a program control framework
 - Use enterprise resource planning tools

46. You have had several issues on your next-generation catalytic converter program. But, finally it is in the closing stage. You want to make sure there is operational sustainability from your program that is ongoing. To do so effectively, you should—
- Update the program document repository
 - Document lessons learned
 - See if residual activities are required
 - Hold a final meeting with key program stakeholders
47. Assume you are preparing your program to implement a new Enterprise Resource Planning program for your company. While you are contracting for the software and its installation, your program team will learn from the contractor how to use it to train the rest of the company in its use, how best to implement it, and how to maintain it. You are preparing your master schedule for this program. Often overlooked in this process is—
- Activities about benefit management
 - Activities about stakeholder engagement
 - Activities about component reviews
 - Activities about program issue mitigation
48. Your professional association in business development is increasing in terms of its membership. You have a core team of people to help you in your program to certify its members, but other team members are volunteers. Recently the Executive Director authorized you to hire some consultants to help on a full-time basis. The stakeholders, who are volunteers and members of the association, have the knowledge and expertise, which are vital to the outcome of this program. However, especially since so many volunteers are involved, and it is a large, complex program, you have had to reach negotiated compromises with some of these stakeholders to respond to their concerns. They are part of—
- The stakeholder engagement strategy
 - Stakeholder analysis and planning
 - The communications log
 - Program stakeholder engagement

49. You are sponsoring a program to digitize all the records in your nation's archives. Some of these records are extremely important but are difficult to digitize because they are ones when your country was established, approximately 500 years ago. However, it is essential that they be preserved, and the effort of your program is far larger than originally anticipated. But, now your government is in financial difficulty, and you wonder if your program will be funded. You must—
- Prepare an initial risk assessment
 - Conduct a benchmarking study to see how other countries have handled this type of project
 - Estimate the high-level financial and non-financial benefits
 - Perform a SWOT analysis
50. Assume you have inherited a program in which your Program Management Office director realized there were three projects under way in which they would be better managed as a program given their interdependencies. As you are the only PgMP in the company, you are managing this new program to retrofit an existing electrical system in your area, so its entire infrastructure can be upgraded rather than building a new facility. You are in the planning phase of this program, and you realize you need to make the business case to add two new components to complete this program in two years. By doing so, it reduces by four years the time required to complete it if you built a new facility for your electricity firm. However, you realize you need the other two components as you studied the three existing components and their milestones. You were at this time—
- Preparing your charter
 - Preparing your PWBS
 - Preparing your master schedule
 - Preparing your scope statement
51. Assume you are in charge of reorganizing your government agency because its funding has been cut by 50% based on the shortfall of the overall available funds in your government. Even with the expansion of your program, to cut the funds, a number of projects and programs were terminated, and in doing so, many staff members lost their jobs. In making the decisions as to which programs to terminate, one of the considerations was—
- The number of staff members involved
 - The overall schedule status
 - The funds already allocated
 - The strategic alignment

52. Your company established a program steering committee, and it meets at least monthly to review progress to date on your program, not just at phase-gate reviews. You and your team worked to identify stakeholders who may have an interest in or an influence over your program and to analyze them to see if they are positive or negative. Your next step is to—
- Develop a stakeholder engagement strategy
 - Prepare an interest/power stakeholder map
 - Prepare a stakeholder register
 - Develop a project stakeholder engagement plan
53. You are the program manager for the development of a complete transformation of a theme park in your country. Your organization operates with a balanced matrix organizational structure, and you have resources supporting your program from a variety of functional departments. Some of these people report to you as well as to their respective departmental managers. You should—
- Work with the functional managers so you can provide input into the performance of these individuals
 - Set up a team-based reward and recognition system
 - Ask the team to develop a team charter to serve as their commitment to the program
 - Release resources when they are no longer needed
54. You were selected early as the program manager as your city decided to bid in the next location for the summer Olympics games, and you helped to prepare the proposal. You were listed in the proposal along with your resume since you have your PgMP. Your city is convinced it has a winning proposal, and it learned it is among three finalists. A fixed-price contract will be awarded. The Olympics Selection Committee wants to meet with you and others from your city for an oral briefing as to why your city should be selected. Your City's Mayor and Commissioners will attend, and you will give the presentation. You decided to give the Selection Committee a copy of your program charter. In it you have—
- Stated as an assumption the excellent weather in your city and numerous tourist attractions and hotel availability
 - Listed all the components that comprise the program
 - Pointed out all the key issues
 - Note your openness to include any other items in the scope of your program they desire

55. Assume your organization is considering an internal improvement program and has identified key stakeholders. You are the program manager and are deciding whether it should focus on the Software Engineering Institute's Capability Maturity Model for Integration (CMMI) to obtain Level 3 and have an opportunity to bid on more U.S. Federal Government projects. The other option is to establish a program to pursue best practices in portfolio, program, and project management using a program management maturity model. As you prepare your business case, you next should—
- Qualify the business benefits
 - Determine its key parameters
 - Use the voice of the customer approach for a market analysis
 - Prepare a high-level approach
56. Assume your organization selected a maturity model to see how it was doing in its work in portfolio and program management, and you hired an external consultant to perform the assessment. The consultant prepared an assessment report and an improvement report. The maturity assessment is one based on best practices and in portfolio and program management, and while the model had 175 best practices, your company is so new to program management and portfolio management, it only achieved 75 of these best practices. You are now leading an internal program to address the consultant's prioritized improvement program. You have seven projects now in your program. As each project manager begins to identify the work to be done on their projects, you want to make sure the program's scope encompasses all benefits to be delivered so you should—
- Follow the PMO's project management standard
 - Make sure the context and framework are documented in a scope statement
 - Use a program work breakdown structure
 - Prepare a benefits realization plan
57. As the contract program manager to integrate the back-office components of your customer's system into a single system that contains data on accounting, finance, sales, business development, personnel, and portfolio, program, and project management, you have a core team of six people and six project managers. You are working to obtain information from stakeholders to better understand the organizational culture and decide to—
- Use questionnaires and surveys
 - Hold a focus group
 - Conduct interviews
 - Use open-ended questions

58. You and your core team have identified within the organization 17 key stakeholders, and there are approximately 33 that have a peripheral interest in your program. You know you will have other stakeholders to add to this list as program progresses. The person, or group, who is responsible for providing project resources on this program is—
- Program director
 - Program manager
 - Program sponsor
 - Program steering committee
59. Assume you are managing a program to completely change the immigration laws of your country as you are working your federal government. The problem is your county has too many people in certain urban areas and not enough people in other rural areas. Newcomers do not want to be told where to live, and many have friends or relatives in the populated areas. Plus, they feel they may not be welcomed in the rural areas. This is high profile program in your government, so you decided to form a program steering committee, with its chair the agency head of your agency plus other members at comparable levels from other agencies with interest or influence over immigration. This situation means—
- You need to identify all the key stakeholders
 - You need a compelling vision for the program
 - You need to recognize the attitudes of affected stakeholders
 - You need to plan when meetings will be scheduled
60. Finally, after three years of planning, your detailed design for the next-generation missile system of your country is complete. You were appointed the program manager for this program, and you now have also prepared your program management plan and schedule, as well as your subsidiary plans. Last week, your program's steering committee approved your program management plan. The next step is to—
- Assign project managers and appoint your core team
 - Prepare charters for component projects
 - Set up your PMO
 - Initiate component requests

61. Assume you are managing a high visibility program that is global with stakeholders located on four continents. You have performed a thorough identification of your program's benefits with your team and have set up a benefits register. In order to develop appropriate performance measures for these benefits, you should—
- Review the business case
 - Meet with stakeholders
 - Take the qualified benefits and turn them into ones that can be measured quantitatively
 - Assign each benefit to an owner and empower the owner to set up metrics and discuss them at the scheduled core team meeting
62. You are pleased to be the first program manager in your company to manage a virtual team. While the company has managed programs for several years, in the past, it tended to hire subject matter experts or ask people from its offices in four other continents to meet in one place to work as a collocated team. It also relied extensively on contractor support. Finally, your executives have recognized that it will be cost beneficial to use a virtual team for your new program to develop a new product that combines the capabilities of a smart phone, an eBook reader, and a tablet in a single device that is less expensive with a higher quality of resolution than is possible with the existing products on the marketplace. Such an approach is one in which you should consider—
- Using focus groups to obtain a picture of the various attitudes of your stakeholders
 - Conducting a SWOT analysis
 - Changing the culture through dynamic methods
 - Using a comparative advantage analysis

63. Assume you are managing a transformation program for your publishing company. The program goal is to make this publishing company the best in the world that appeals to each generation with its books available in innovative and traditional formats. This program was initiated by the CEO who saw a dismal trend of declining sales. Obviously improving sales, and also marketing, are components. You are to involve the organization as you work on the program since everyone is a stakeholder. As the program manager you have your PgMP, the members of the core team have their PMPs, and your nine component managers also have their PMPs. Your program management plan was approved by the CEO and the executives, who comprise your program steering committee. You now need to—
- Provide as much support as needed to component managers in their daily activities
 - Work to ensure the component managers are collaborative
 - Actively manage each project until you have confidence in the component manager's ability to do so without your continual involvement
 - Mentor component managers in their roles by working with them throughout their projects
64. As the program manager for the new landfill program for your county, you are facing a number of challenges. You have identified a large number of stakeholders, mostly in the county, and the residents who have this "not in my backyard" syndrome about the landfill program, along with environmental activists. However, you recognize you need to engage each stakeholder group, even if they are negative, to ensure overall success. Recently, at some key meetings, you and your team realized some of the active stakeholders were missing. You realized some also missed the previous meeting. To identify and assess causes of nonparticipation, as a program manager, one tool to use is—
- Root-cause analysis
 - Cause-and-effect diagrams
 - Variance analysis
 - Conflict resolution strategies

65. Assume you have decided to sponsor a new program to develop a new way to determine whether or not an organization should bid on any opportunity, and the steps it should follow to predict whether the submitted proposal will be selected. This will be a quantitative model that basically can transform the way business development is handled. It will show areas of strength and areas in need of improvement and an approach to improve an organization's chances of winning the opportunity. As the sponsor, you received approval to move to the initiating phase from your Portfolio Review Board. It now is appropriate to—
- Define the program's scope and benefit strategy
 - Identify the program's benefits
 - Appoint the program manager
 - Prepare a program governance plan
66. Your company has established a program to manage the development of new pet food products, and you have been appointed manager of this program. It is the first program of its kind in your company; its structure was set up because numerous projects in the planning stage have dependencies and require some of the same resources. You realize that there are some commonalities among the benefits in the projects. Your program will be the first in your company to have a program steering committee throughout its life cycle. It has led to the company establishing program governance as a standard process, and it then addresses—
- Endorsing or approving recommendations for programs
 - Aggregate performance of components of the program
 - Value indicators for program components
 - Models to ensure that the portfolio makes the best use of resources
67. You are the program manager for the International Air Traffic Association. The executives, representing all the airlines in the world, want to set up a global program for loyalty to airlines rather than the myriad of separate reward programs that now exist. They have built a business case for this program that shows in doing so benefits will accrue as there will be fewer disruptions to passengers and to the airlines if a flight is canceled, and the passenger could have taken a non-stop flight from his or her home airport rather than needing to travel to another airport just for the loyalty program. You have been asked to document thresholds for evaluating achievement of key performance indicators. This should be in—
- The business case
 - The benefit register
 - The benefit realization plan
 - The benefit report

68. Your organization has a defined process that it follows to determine which programs and projects should be in the portfolio, and this process is followed before leadership approval is received officially to authorize a program or project. In the past 10 years, your company, XYZ, has focused on projects. It has set up a project management methodology, which project managers are to follow, and it also has a Project Management Office. However, you recently attended a conference, and you realize since you are a member of the XYZ's Portfolio Review Board that many of the projects you are considering at your next meeting might be better managed if they were a program. After this conference, you met with other members of the Portfolio Review Board and explained how many of the existing projects in XYZ might be better organized as a program, so they could then obtain more benefits than if the projects were managed in a standalone fashion. Now, with the upcoming Portfolio Review Board meeting, of the following possible key initiatives, which one would benefit by being managed as a program—
- a. Expanding a ski area
 - b. Setting up a career path for people in the project management profession
 - c. Upgrading the nation's airspace system
 - d. Introducing a new project planning tool in a large organization
69. You are managing a program under contract with a major motion picture studio. Your contract is for three years with annual renewal possible if the program is completed on schedule. Your program management plan has been approved by your program steering committee and your client. You believe you have the resources you need to meet your aggressive schedule. However, for best results, you need to—
- a. Have a quick response plan for schedule changes
 - b. Establish partnering agreements with any contractors you may use
 - c. Invite your client to be on the program steering committee for program reviews
 - d. Prepare a weekly dashboard report for all stakeholders so they can gauge progress

70. On your program, two key members of your program steering committee are not attending any meetings. The three other members are pleased with your progress, but you are concerned because these committee members are not participating, sending substitutes, or communicating with you when you send status updates. To avoid incorrect assumptions about their lack of participation, you should—
- Request a face-to-face meeting
 - Ask a core team member to meet with some of their staff members
 - Talk with the other committee members about their lack of participation
 - Conduct a thorough analysis of the situation
71. Although each program has its own program steering committee, there are times when issues arise that a program manager may need to interface with executive management and external stakeholders. If this needs to be done—
- Escalate the issue first to the steering committee
 - Obtain needed information to inform the steering committee
 - Follow the issue escalation process explicitly
 - Ensure the issue is one that has major implications outside of the program
72. As your government agency moves toward performance-based management, the senior executives issue a five-year plan with a number of initiatives. Each program and project will have key performance indicators. Programs and projects will not be pursued without a detailed business case that is approved by a program steering committee composed of senior managers from each of the functional units. You are appointed as the program manager to develop processes for these initiatives and are working on your charter. Before doing so, you worked with the sponsor and the sponsoring organization to conduct studies and estimates and prepare a high-level risk assessment. Now you should—
- Seek guidance from your sponsor
 - Complete the charter
 - Update the business case
 - Expand your roadmap so initial milestones will not be met for at least two years
73. Your program to develop a 12G phone is being terminated early because your competition already has a 12G phone model on the market. This early closing has resulted because of—
- Poor performance
 - Inability to deliver benefits
 - A technology change
 - Realignment of strategic goals

74. Your company is a worldwide leader in Six Sigma and the ISO 9001.

Because of the importance of quality management, you appoint a member of your core program team to be responsible for quality planning on your program. At program steering committee, he will often describe whether quality standards for the program are being met. The steering committee is interested because—

- a. It approved the quality approach
- b. Quality issues are covered in reporting and control processes
- c. It ensures consistency in program management
- d. These standards must be met before approving component transition

75. You are the program manager for an updated enterprise resource planning system that also will include business development and knowledge

management modules. Time to market is critical, and as the program manager you know other competitors' products tend to take an extremely long time to implement so with your new products you also are emphasizing ease of implementation and training end users. You will be using external contractors for part of the work. As you administer procurements, your need to—

- a. Follow the contract management plan
- b. Prepare a contract administration plan
- c. Maintain visibility so the budget is used to obtain program benefits
- d. Conduct procurement audits

76. You are Company A's program manager for the development of an online

banking system for your community bank, for which your company will realize \$20 million in US dollars. To track the various stakeholders, you and your team set up a stakeholder register and prepared a stakeholder engagement plan. The individual or organization responsible to achieve strategic objectives is the—

- a. Portfolio manager
- b. Program steering committee
- c. Program sponsor
- d. Program manager

77. You are the program manager for a water-alleviation program in your city

that requires extensive equipment. Some of this equipment represents new technology. As the program manager, you are preparing regular program performance reports, and each one discusses this equipment. In these reports, they should include—

- a. Risk analysis
- b. Resource use
- c. Approved change requests
- d. Audit recommendations

78. Your water alleviation program in your City is progressing. You have a core team of six people, and you have seven project managers. You were fortunate this year in that while your City got a lot of heavy rain during the rainy season, it did not get any hurricanes. However, the lake levels are still low, and residents cannot water more than two hours once a week until your program is complete. The City also is limited to watering only once a week as well but for four hours. You have a number of key stakeholders in the City government as well as the residents plus your own company. Therefore, you realize the importance of interacting and engaging with stakeholders to—
- Receive stakeholder feedback
 - Communicate program benefits
 - Communicate with stakeholders
 - Maintain program strategic alignment
79. Assume your CEO just was appointed to lead your company and came from an organization that focused on new product development in the medical device field. There, programs and governance boards were accustomed ways of working. However, now he is leading an automobile insurance firm, which has just started the process of focusing on projects rather than only operational work. The CEO wants to also focus on programs and having a program steering committee for each one over \$1 million US. You are to lead this program and set up the program steering committee. Since this concept is new to your company, your first step is to perform an assessment of governance, and it is immediately apparent it is one of extremely low maturity. Therefore, you need to—
- Prepare a governance plan
 - Ask the CEO to issue a governance policy statement
 - Define and establish governance for the program
 - Determine roles and responsibilities for people who will be on the steering committee

80. Having worked on programs before in your former farm equipment company, you now are introducing program management to people in your new position as a program manager at a major insurance company. You are its first program manager. Since your country has a health insurance plan, but its citizens really do not like it, your CEO wants to have a health insurance plan that meets the needs of its customers at an affordable price, whether the customers are individuals or organizations. Working on a program is a culture change at this company. You decided to introduce them to program management by preparing a roadmap because—
- It assesses the program's progress toward realizing its expected benefits
 - It shows dependencies between all the tasks to be performed
 - It defines program specific goals and objectives
 - It shows when key decisions will need to be made including on components
81. When your program is complete, it will generate more than 80 percent of the revenue earned by the company. Thus, it will have a major impact on the balance sheet. To assist you in your work, you prepared a program financial plan and established a budget baseline. Now you are tracking, monitoring, and controlling funds and expenses. Not to be overlooked in this process is—
- The profit the company earns
 - The balance between profit and loss
 - The operational costs
 - A summary of the revenue, direct cost, indirect cost, operating profit, and net profit of the company at a given point in time
82. Risks are ever present in our work on programs, and as program manager we need to plan for them, recognize when they do occur, and hopefully turn them into opportunities to exploit and embrace. You do not want any of the program benefits to be affected negatively by risks. You decided to determine a risk structure for your program and want to assign each benefit a probability level. In doing so, a factor to consider is—
- The ability of the organization to absorb the change
 - The number of stakeholders affected
 - The impact on the strategic plan if the benefit is not realized
 - The difficulty of transitioning the benefit to operations when it is realized

83. Your company is noted for its maturity and excellence in program management. It has received awards for its successes in program and project delivery. Last year, it received the Project Management Office of the Year Award, even though it really calls its PMO a Program Management Office, which it established about 12 years ago. One reason your company is a leader in the field is the PMO provides support in—
- Recognizing the use of environmental enterprise factors
 - Defining quality standards
 - Ensuring alignment to organizational strategy
 - Adhering to standards of professional conduct and responsibility
84. Ideally, the program's architecture is built around a core group of stakeholders, who are the decision makers. While the program's architecture obviously will evolve, if this approach is followed, then—
- It is time to establish the program's steering committee
 - Greater synergies are required between the program team and the strategic planners in the organization
 - Governance becomes the catalyst for change
 - A stakeholder perspective approach is followed
85. You have been a program manager for three years. You realize that a common understanding of program scope among the stakeholders leads to greater program success. Throughout the past three years, you have communicated extensively with your stakeholders and believe you are meeting most of their expectations, but some still have some doubts as to overall success. Therefore, in your last program review with your program steering committee, you realize—
- A stakeholder management plan would be helpful
 - Program scope is typically described in terms of expected benefits
 - Stakeholder buy in will increase if you decompose the program's scope into details for its components
 - The program charter requires review

86. For your program, you prepared a detailed stakeholder analysis. Stakeholder A thought that the program objectives were to deliver a detailed plan for your city's growth and development over the next 10 years; Stakeholder B thought that the purpose was to design a water-retention process to ensure that each citizen would have adequate water in the future; Stakeholder C thought that the program was to provide services to the city for its overall management by outsourcing its information technology (IT) services, personnel, and procurement functions; and Stakeholder D thought that the program was to provide a detailed workflow for all the city's functions. In the face of this lack of common understanding of the program's purpose, you need to—
- Distribute the program's vision
 - Prepare a stakeholder engagement plan
 - Prepare a benefits management plan
 - Spend time and energy with known stakeholders
87. In a meeting with your program's steering committee, you discussed ongoing and completed risk responses. You have been working to minimize risks, and a member of your core program team is responsible for overall risk management as her primary activity. You recently held a risk review meeting for your program, and many risks have occurred that were not identified and analyzed. This was followed by a meeting with your steering committee, which directed you to prepare a comprehensive update on all risks. This decision by the steering committee is in its role in—
- Establishing an issue escalation process
 - Program reporting and control
 - Program performance support
 - Monitoring progress and determining if changes are needed
88. You are a member of your insurance company's Program Selection Committee, which is considering a number of potential programs. Program A is estimated to cost \$100,000 to implement and will have annual net cash inflows (ACNI) of \$25,000. Program B is estimated to cost \$250,000 to implement and have ACNI of \$75,000. Program C is estimated to cost \$600,000 to implement and have ACNI of \$125,000. Program D is estimated to cost \$125,000 to implement and have ACNI of \$50,000. Your selection criteria are based on the shortest payback period. You recommend that your company select—
- Program A
 - Program B
 - Program C
 - Program D

89. As an energy company “upstream” program manager, you use your program work breakdown structure to build your schedule. You have seven components in your program, and it is to be completed in three years. The best approach is to—
- Hold an off-site meeting in which project managers and your core program team work together to complete the schedule
 - Have the project managers build the detail for their projects and then roll it up into the control points and PWBS program packages
 - Work with your core program team to develop the program schedule and then ask the project managers to use this schedule as they prepare more detailed project schedules
 - Have the first draft of the program schedule identify the start and end dates of the components
90. Your molecular biology program is scheduled to last three years. Project A has been under way since the program began and is scheduled to be complete at the end of year 2. Project B is scheduled to begin in year 2. Project C has just begun and requires some domain-specific resources in molecular biology from both Projects A and B. Project Manager A is concerned that Project Managers B and C will require some of her key scientists; if these resources are reassigned, then the end date for Project A will slip. She has been practicing a philosophy of “no secrets” with the client and has informed Project Managers B and C that she is not willing to let any of her molecular biologists leave Project A until it is officially closed. You receive a call from the client requesting a meeting to discuss resource issues and the status of Project A. At this point, you—
- Meet with Project Manager A and tell her to first talk with you before she informs the client of any concerns in the future
 - Tell Project Managers B and C that you support Project Manager A’s decision not to release any of her key scientists
 - Let the client know you are aware of this issue and are working to balance the program’s needs with resource availability
 - Meet with all three project managers and empower them to reach consensus on how the resources should be redeployed before you meet with the client

91. You are managing Program BBB for your manufacturing firm. You have one subsidiary program and seven projects thus far and the program is just beginning. You need to set up a governance structure for these components. You have your PgMP® and have managed successfully two other programs for your firm. The best approach to follow is—
- Use the same governance structure as that for your program
 - Ask your PMO to provide the governance function
 - Manage a component steering committee
 - Have your sponsor provide oversight and determine when the program steering committee should be consulted
92. You are managing a program whose budget at completion (BAC) is €420,000. The program is 10 percent complete and has an earned value of €42,000. The actual costs (AC) are €50,000. This means that—
- Although the program is over budget, the overrun is insignificant at this time
 - The program is over budget by –€8,000, which is a major problem
 - You need to calculate a new estimate to complete (ETC)
 - The CV is €378,000, and immediate action is necessary
93. You are managing Program BBB for your manufacturing firm. Program EEE is experiencing severe resource shortfalls. The sponsor is the same for both programs. Your program steering committee holds an emergency meeting to decide what you can do to assist Program EEE. The committee asks you to transfer seven of your manufacturing engineers to Program EEE full time, which means you should—
- Notify your stakeholders
 - Update your roles and responsibilities matrix
 - Work with the procurement department to acquire contractors to fulfill these roles
 - Involve the manufacturing and operations managers

94. Your company is new to program management, but it has practiced a management-by-projects culture for many years. Many people now have their PMPs® as well as advanced degrees in project management. Recently, you took a seminar at a PMI® conference on program management and suggested to your manager that the company should consider adopting program management because of its benefits to the organization. Before proceeding to take this idea to the Executive Committee, he asked you to perform an initial assessment as to why a focus on program management would add benefits. You need to therefore—
- Analyze the strategic plan
 - Show the link to organizational program management
 - Identify integration opportunities
 - Define the objectives
95. You manage a program in the Ministry of Education. Your seven-year program is designed to ensure mandatory testing requirements for high school students throughout the country. Your program receives funding soon after the start of each fiscal year. Funds that are not spent during a fiscal year cannot be allocated to other programs or agency activities; rather, they revert to the general fund. As a program manager, you ensure that—
- Your program focuses on reserve analysis
 - You spend all the money allocated in each fiscal year
 - All available financial information and all income and payment schedules are listed in detail as the budget is prepared
 - You add at least a 10 percent margin to the budget in anticipation of the reductions by the Ministry's budget office
96. In working with stakeholders and engaging them in the program, as a program manager you know it is often difficult to manage stakeholder expectations. One approach to consider is to identify and reconcile stakeholder needs and expectations is value management since the goal of program management is for the program to add business value to the organization. Value management is a successful approach to use. It helps the program manager and team to—
- Prioritize objectives and delineate benefits
 - Identify critical success factors
 - Establish groups of stakeholders
 - Define a value proposition

97. Your organization is embarking on a program to establish a culture of knowledge transfer. You established a lessons-learned register on your last project. The enterprise program management office (EPMO) was impressed and suggested to the CEO that a program focusing on knowledge transfer is needed. The CEO concurred, and you were appointed program manager. Two people from the EPMO have been assigned to the core program team. This is important because—
- The organization lacks available resources
 - The two members from the EPMO have expertise in this field
 - The EPMO Director is the program sponsor
 - The EPMO provides documents and knowledge transfer support
98. Assume you are managing a project in your country which now allows people to buy in each state a pass to enable them to avoid the need to stop at toll booths on highways and bridges. However, each state in your country has a different type of pass so if you are in a different state, you cannot use it. As the program manager, your program's goal is to have an identical pass that every state can use on its highways and bridges. Additionally, your program will enable the pass to be used as well in airports at parking lots and garages. As you work on your program, you find there are a number of issues involved as states are reluctant to change to a new system and various stakeholders have different concerns and issues. You have analyzed these issues to see if they require any changes. You are wondering if the problem is previously unidentified requirements. You need to evaluate whether they are consistent with—
- Resource control
 - Program scope
 - Risk management
 - Organizational strategic goals

99. You are an executive with a major recording studio. Four new groups have auditioned for a record contract, but you can select only one. The program to launch any group consists of Web site development, music videos, a nationwide tour, T-shirts, and a fan club. Your head of Marketing has done a net present value (NPV) for each group. Which do you choose?

<i>Group A NPV at</i>	<i>Group B NPV at</i>	<i>Group C NPV at</i>	<i>Group D NPV at</i>
5% = 5,243	5% = 2,320	5% = 6,400	5% = 3,000
10% = 2,841	10% = 1,254	10% = 3,275	10% = 2,755
15% = 1,563	15% = 688	15% = 1,679	15% = 700

You recommend that your company select—

- a. Group A
- b. Group B
- c. Group C
- d. Group D

100. Since you have your PgMP and have more than 20 years of experience, your expertise in program management in your company is well known, and you are often consulted as a subject matter expert in the field. Therefore, it is extremely likely that—

- a. You will be selected as the next program manager for the company's upcoming new program
- b. Your program steering committee will grant you a large amount of authority
- c. Since you have been in the company for 20 years, you know all the key stakeholders, so it is easy for you to engage them
- d. You also have the risk certification, so you can easily identify all internal risks a program might face in your company

101. You now have five projects in your next-generation PDA program. So far, you are pleased with your core team and its progress, and you have a program steering committee in place to oversee your progress. They also are responsible for gate reviews. You have just completed the PWBS for this program. Your now can—

- a. Generate the program schedule
- b. Develop the issue resolution process for program steering committee involvement
- c. Negotiate for project team members
- d. Identify key milestones

102. The washer and dryer are appliances that have changed slowly over the years. Your company produces both of them and is the market leader. You CEO decided it was time for a third-order change rather than an incremental first-order change. You are the program manager charged with determining how to make your company's washer and dryer remain the market leader and the appliances trend setters for everyone to appeal to consumer of all life styles. You identified first many benefits for your program as a first step. You set up the program so that rather than have all the benefits delivered at once, you would deliver them incrementally, so consumers would see change and wonder what might happen next. You then realized a key benefit was not going to be met and would cost too much to implement, and you need to take corrective action, which means—
- You need to revise the benefits management plan
 - The benefits analysis and planning phase and benefits delivery phase activities are performed iteratively
 - You need to issue an internal communication to the internal stakeholder as to why it cannot be done
 - You need to meet with the CEO and other members of the C-Suite for direction
103. Assume your county government decided to move into program management as it found that a number of projects under way had inter-relationships and interdependencies in terms of the benefits they were to deliver to the citizens in the county. While the county has a project management methodology it did not have one for program management, so it decided to build on the best practices in the Project Management Institute's *Standard for Program Management*. As you reviewed the guidelines in *The Standard for Program Management*, you noted some activities are performed throughout the course of the program; an example is—
- Program Schedule Control
 - Benefits Realization
 - Program Performance Monitoring and Controlling
 - Manage Program Issues
104. As the program manager, you have prepared your stakeholder register. Now you are categorizing your stakeholders to then start analyzing them. You want to obtain information to highlight differences in their needs, expectations, or influence, and you want to have a deeper understanding of the impacts of your program concerning your stakeholders' attitudes about it, so you decide to use—
- Interviews
 - Focus groups
 - Questionnaires and surveys
 - Brainstorming

105. You are managing a program that comprises new systems applications development and maintenance activities and now are planning it. These applications are critical to your company, as they involve access to proprietary data. The systems must be available to your clients on a 24/7/365 basis. Much of the work is to be outsourced. Your program management plan—
- Marks the completion of the planning phase once you complete it
 - Is based on formal approval of your business case
 - Integrates the program's subsidiary plans
 - Enables you to initiate your components
106. Working as the program manager for this standard toll pass system, since there are about 30 such systems in existence now in your country to avoid the need for toll booths if people elect to buy these passes, you realized you needed to take the best practices of the various pass systems already in existence and incorporate them into your program. You found that one State had a quality plan for its pass program, while most of the other States instead were only focusing on inspection as a quality tool and technique. Your emphasis is to perform quality activities throughout the program. As you focus on quality control, you should ensure—
- Checklists are completed
 - Quality audit recommendations are implemented
 - Health checks are performed
 - Service level agreements are established
107. The program sponsor for a new customer-focused program in your organization submitted a business case to the Portfolio Review Board, which was approved. Then, your company merged with Company ABC, and it already has a comparable product in its pipeline. No one has done an inventory of Company ABC's programs and projects to see if there are any overlaps with ones in your company, but you worked for ABC part-time last year before joining Company MNO. You should—
- Inform the sponsor in MNO
 - Work with the sponsor in MNO to revise and resubmit the business case
 - Introduce the program manager in ABC to the MNO sponsor
 - Inform the Portfolio Manager in MNO

108. Members of your program steering committee are complaining about performance information from your program. They claim that your reports are too detailed, are too many in number, and are produced on a shifting schedule. You met with each person on the committee early in the program and thought you were meeting their information requirements. You need to—
- Prepare a program dashboard
 - Use the customer feedback to support program governance and stakeholder engagement
 - Obtain a more comprehensive software tool to generate information needs of different stakeholders
 - Find different ways to better distribute information on the program's status
109. For seven years, you have managed a program that involved breakthrough scientific research. You are now in the closing stage. You already met with each scientist involved in the program at the time his or her work was finished. You also met with a member of your enterprise program management office that specializes in knowledge management to ensure that the intellectual property developed in the program is captured and documented for future reuse. You are collecting your program's records. You are—
- Organizing documents and archiving them for other purposes
 - Providing input to your final report
 - Recognizing individual efforts as well as the efforts of the entire project team
 - Officially releasing each scientist to his or her functional organization
110. Recognizing the importance of benefits realization and management, as a program manager, it has been noted that a best practice to follow is to be able to quantify as many benefits in your benefits management plan as possible and also to be able to communicate their status as required quickly to stakeholders. You and your core team decided that a best practice to follow in your program to develop a new drug to cure bone cancer with limited if any side effects and to beat your competitors to market even with all the federal regulations was to—
- Use tangible benefits in your benefit management plan
 - Have each stakeholder sign off on your benefits management plan indicating his or her concurrence with it
 - Invite Governance to regularly schedule benefit reviews, which are included in your benefit management plan
 - Maintain a benefits register

111. As the program manager working on the development of an advanced polymer chemical for all types of furniture and clothing, you are in the process of beginning your program. You were selected as the program manager because in past program work, you excelled in several areas, one of which is—
- Identifying high-level risks
 - Ensuring alignment of program objectives with organizational strategic goals
 - Preparing a plan to initiate the program
 - Managing stakeholders in ensuring strategic benefits are understood
112. Finally, your program to develop the advanced polymer chemical for all types of coats is near to completion. You have had seven components in your program, and the last one should finish in two months. You have been involving the people in your operations support group to be part of your program team meetings now for the last year and earlier included them on the distribution list for your status reports, so they felt they were part of the team for success as you recognize transition planning is the key to benefits sustainment in program management. As a program manager, you also recognize the importance of ensuring that component transition requests are prepared. It is especially important during—
- Transition Planning
 - Direct and Manage Program Execution
 - Develop Program Management Plan
 - Program Delivery
113. As you work on your program to design, develop, and manufacture a class of farm equipment that can be used above the Arctic Circle, you are also maintaining a spare parts inventory and fulfilling spares requests for clients in addition to the new work in this program. You met today with the spare parts project manager, and he had a change to his project that affected his scope dramatically. When you reviewed this change with him, you realized it also would affect the scope of the manufacturing project manager's project in your program. As a result of your work in Program Scope Monitoring and Controlling, this means you should—
- Authorize funding for these changes
 - Issue an approved change request
 - Convene your CCB
 - Update the PWBS

114. On your program to design, develop, and manufacture a class of farm equipment for use above the Arctic Circle, you want to make sure that the benefits from the program will be sustainable ones. Your sponsor is interested in having regular status reports about the progress of your program especially since she is located below the Arctic Circle and rarely makes on site visits given the weather conditions to assess progress herself. To provide a clear picture of your program's performance as a whole, you must—
- Forecast information on the significant project components
 - Aggregate information across projects, subsidiary programs, and program activities
 - Provide detailed reports on component projects at regular intervals
 - Monitor the status of the key deliverables
115. Assume you are working for a dry foods company. For the past five years, every one of your projects in this company has met its goals in terms of being on schedule, within budget, and meeting its specifications. However, your company finds that even though its projects are meeting its goals, overall the company is not meeting its strategic goals and objectives. You were asked to meet with the executive team to discuss your opinions as to what is occurring in the company as you are an experienced and successful project manager. You pointed out that you felt the basic problem was:
- The projects should be managed as a program
 - The programs were not providing needed benefits
 - The organization's strategic goals would change, but the program managers were not aware of the changes
 - The organization requires a Program Management Office
116. It seems as if talent retention is a major concern in your area of your country as many outsourcing firms are located close to one another in two different cities. It is easy then for people to get jobs elsewhere as there are many companies that want the same types of skills and competencies. You are leading a program in your company focused on talent retention to avoid losing trained and component people. It has three components, and you have been given funding and dedicated people to work on the program team. You have three months to complete this program. You realize you can—
- Reallocate resources among components
 - Use the benefits in your charter and build on them during the three months
 - Send a questionnaire to each employee about the goals of your program
 - Meet with your program steering committee bi-weekly given the short time to complete the program

117. There are numerous activities associated with benefits analysis and planning. Of these activities, it is especially important to—
- Communicate program performance metrics to stakeholders
 - Prepare the benefits management plan
 - Prioritize components and their interdependencies
 - Quantify incremental delivery of benefits
118. You have set up measurement criteria for each of the benefits you identified in your benefit management plan. You now want to establish a baseline for the benefits in the plan. As you establish your baseline, you have collected some key organizational, financial, and operational metrics against which you can measure improvements. The purpose of the baseline is to—
- Devise a strategy to collect meaningful metrics for stakeholders
 - Communicate progress with your sponsor and key stakeholders
 - Assess process interdependencies
 - Guide the delivery of benefits as the program progresses
119. Finally, after two years of planning, your program management plan to convert customer relationship management software, supplier management software, human resource software, and telecom systems from legacy systems to an integrated platform was approved. At last, you are working to execute your plan, and you have four components in your program thus far. Since your program will last three years and is complex, you realize you—
- Need a Configuration Control Board
 - Must update all documents if a change is made
 - Need to mitigate any negative consequences that may affect benefit delivery
 - Need to quickly form a high-performing team, which includes people working on components
120. Finally, after four years of executing, your program to convert customer relationship management software, supplier management software, and human resource software from legacy systems to an integrated platform is almost completed. Only the telecom component remains to be completed. Your next step is to—
- Work with your sponsor to prepare a request to transition the three components
 - Deploy resources from the completed components to the telecom one to be able to close the program
 - Evaluate team member performance on the completed components
 - Review financial status before releasing resources

121. In a disruptive economic world where change is the norm and not the exception, a new product released today may be obsolete tomorrow. Work often is done in silos in organization that do not manage by projects let alone by programs. But programs are a necessity if benefits can be provided if structured appropriately and also in terms of maximizing resources given the talent gap that exists in many organizations. Assume you are managing a program in an uncertain and complex environment. Your business case was approved by your Portfolio Review Board, and you now are initiating the program. You wish to encourage creativity and innovation in your team such that your new product when the program is complete has lasting value with sustainable benefits. You have established metrics to track effectiveness in achieving the benefits proposed in your business case. Recognizing that past programs have failed because of the inability to deliver value and the differences between stakeholder expectations, you decide to—
- Focus on stakeholder engagement as your key responsibility as a program manager
 - Continually reassess the alignment of your program's goals with those of the organization
 - Establish governance as a networked approach to best create and realize value
 - Regularly hold sessions with the Portfolio Review Board to ensure their expectations for your business case are met or need refinement
122. You are assuming a position in a company that has not had much experience with program management. You will be leading the program team and performing a business function for your program. The business case has already been made, and the program is scheduled to move into the Program Initiation phase. As the program manager, one competency that is embedded in your job is—
- Communication
 - Political skills
 - Strategic visioning
 - Integration

123. Assume you are managing a program at your University to establish a Master of Science degree in Program Management. Already, the University's Master of Science degree in project management is well recognized, and it has been accredited by leading organizations. Your business case for this program was approved by the University's trustees, and they asked for a benefits management plan, which you prepared, and they signed off on and approved. However, they want the program steering committee to conduct periodic reviews of progress to ensure—
- The identified benefits support best practices
 - The benefits are aligned with the University's strategic objectives
 - A benefit owner is assigned
 - Realistic measures of these benefits can be prepared
124. Working on this program to establish a Master of Science degree in Program Management, assume you have a meeting coming up with your Governance Board in two weeks. You need to demonstrate at this stage gate review how you will report and track the benefits from your program. However, in your work in planning, you have identified a number of key factors external to your program that affect the proposed benefits, one of which is that your leading competitor in this field and located in your state also is looking into such a program and plans to offer it in an on-line fashion; your University only operates in a face-to-face mode. You know how important it is to track benefits and learning about this other University's plans to offer the degree on line is a key benefit that you had not planned for but now feel it is essential. The new benefit actually represents a(n)—
- New project
 - Opportunity
 - Major issue
 - New program
125. As a program manager, you recognize the importance of effective risk management. You want to maximize any risks that may be opportunities that can benefit your program and the organization. As you work in program risk management planning, you define risk profiles, which—
- Are collected through surveys
 - You brainstorm with your team and other stakeholders
 - Are expressed in policy statements
 - You determine through interviews

126. You have long been a proponent of program management, and when PMI first announced the PgMP, you were one of the first people in the world to attain it. You tend to be selected to manage complex programs with your extensive experience. You have learned that having a program steering committee is essential to success, and you prepare a comprehensive governance plan. Therefore, you include in your governance plans—
- Stakeholder engagement
 - Benefits analysis and planning
 - Alignment with organizational goals
 - Stakeholder prioritization
127. As the program manager for a new pipeline system that has as its goal no potential incidents of any type, you have a major challenge as your company in the past has had a poor safety record. This program is complex, and this goal will be difficult to achieve. However, after working to plan the program for three years, your program steering committee met and approved your program management plan. As you move to approve components to be part of your program, you need to—
- Review the component charter
 - Set up a change request process
 - Review the program's business case
 - Prepare component initiation requests
128. Your program management plan has been approved. So far, three projects have been initiated and authorized to be part of your program, and other components may be added later. You have staffed your program team with a variety of in-house staff members, selected consultants, and several new full-time employees. It is now time to—
- Prepare your team development plan
 - Update your program resource plan
 - Prepare your resource management plan
 - Update your staffing management plan
129. Stakeholders are essential on programs, and you realize they are necessary to overall program success. However, your program is large and has at least 300 of them, and 50 have expressed an interest to be actively involved. You recognize the primary objective of stakeholder engagement is to—
- Identify, analyze, categorize, and monitor them
 - Work to turn as many stakeholders who are negative to the program into positive proponents of it
 - Identify and analyze stakeholder needs and expectations and further their support
 - Gain and maintain their buy in to program benefits

130. Sensemaking is critical in programs and enables different stakeholders who are involved in or interested in the program to make sense of it and have a collective understanding as to why the program is being undertaken. There are a number of individual and collective activities in sensemaking to ensure stakeholders are engaged and can accept the outcomes of the program. As a program manager to engage your stakeholders in sensemaking, you can—
- Develop social groups
 - Hold focus groups
 - Use cause-and effect analysis
 - Recognize different motivational styles
131. You are a member of your organization's Program Selection Committee, which is conducting an off-site meeting to review the company's five major strategic goals, all of which are weighted equally. Goal 1 is to produce the highest possible quality products; goal 2 is to provide outstanding customer relationship management; goal 3 is to reduce reliance on external supply sources and maximize internal resources; goal 4 is to reduce manufacturing costs; and goal 5 is to maximize productivity. You are considering four programs and will recommend one to the CEO. Program A partially supports goal 1, fully supports goals 2, 3, and 4, and does not support goal 5. Program B fully supports goals 1, 3, 4, and 5, but does not support goal 2. Program C fully supports goals 1 and 2, partially supports goals 3 and 4, but does not support goal 5. Program D partially supports goals 1, 2, and 5, and fully supports goals 3 and 4. Considering this information, your recommendation should be to select—
- Program A
 - Program B
 - Program C
 - Program D
132. You are preparing for a major steering committee review of your program. The program sponsor is especially interested in progress on Project A, as it provides the foundation for two other projects, and at the last meeting it was behind schedule. You want to ask the committee to approve the initiation of a new project. However, it is the committee's responsibility to—
- Request an audit of Project A
 - Focus on overall performance at this meeting and convene another meeting to determine if the new project should be initiated
 - Ask for data on Project A's performance to date and especially its use of resources
 - Determine minimal acceptance criteria

133. As a program manager, you consider the interests and concerns of all your stakeholders for program success. You manage communications to ensure that your stakeholders are informed about what is happening on your program and so that you can resolve any issues of importance to them and understand their feedback. This is done as part of your responsibilities in—
- Communications Control
 - Information Distribution
 - Stakeholder Engagement
 - Communications Planning
134. Assume you are managing a program so your organization, a Fortune 50 company, has a standard program management system (PMIS) that all programs in all of its 90 business units will use. Such a common PMIS is a major internal program, and as a result, you have a limited budget to work with to make sure it is a success and is adopted by the heads of the business units and its program managers. You are following guidelines in the Project Management Institute's *Standard for Program Management* as you prepare this PMIS. You find as you monitor and control the program's finances you need to be both proactive and reactive. An example of being proactive is—
- Identifying impacts to the components from overruns or underruns
 - Responding to necessary but unplanned activities that negatively affect the budget
 - Responding to necessary but unplanned activities that positively affect the budget
 - Using cost forecasting techniques on a regular basis
135. You are Company A's program manager for the development of an online banking system for your community bank, for which your company will receive \$20 million. Your management at the highest level is totally committed to this program and it is the number one program in Company A's portfolio. Your program steering committee is dedicated to its success. As a result, the chairperson of the committee is—
- The program sponsor
 - The CEO
 - The portfolio manager
 - The Director of the Enterprise PMO

136. People seem concerned of the disruptive nature in how work is done in the society throughout the word. Consider, for example, the advent of Uber and Lyft in the transportation services. Therefore, in your business case to meet future market demands, you are leading a program in your dairy cooperative to ensure its products are safe, meet regulatory and legislative requirements, and are ahead of the competition so it causes disruptions rather than reacts to them. You are now preparing your charter and decided to conduct a change assessment to see how the company will adapt to the various changes generated when your program is complete. To do so you—
- Involved a greater number of stakeholders and got their suggestions
 - Estimated the likelihood and possible impact of the changes
 - Included a change control board as part of your charter
 - Ensured you had the authority to approve or reject most of the proposed changes that could affect your program
137. You want to identify threats to your program as well as any opportunities that could benefit from them. Therefore, as the program manager assume you are working on risk management planning for your program by considering its components. You realize in doing so that—
- You should establish triggers for the project risks
 - You should establish an agreed-upon basis to evaluate risks
 - You should identify intra-project risks
 - You should establish a contingency reserve
138. Your organization is ISO 9001 certified. As program manager, you have arranged for a member of your company's Quality Assurance Program (a Black Belt in Six Sigma) to support your program. This team member reports directly to you and by dotted line to the manager of the Quality Assurance Department. In his first audit, he finds that one of the projects includes several key service management activities that have not met quality requirements. Your next step is to—
- Facilitate an off-site meeting of your core program team to determine how best to handle this deficiency
 - Convene a meeting of your program steering committee to request that an additional resource be added to serve as a project manager for these activities
 - Prepare a quality assurance change request
 - Revisit the program's quality management plan and update it

139. You are Company A's program manager for the development of an online banking system for your community bank, for which your company will receive \$20 million. One of your first tasks was to work with your sponsor and specify the purpose of the phase-gate reviews and when they will be held on this program. One goal of these reviews is to—
- Monitor the business environment for changes
 - Assess strategic alignment of the program
 - Approve the program to continue with modifications
 - Identify the key decision makers and stakeholders associated with this program
140. You manage a program for the Occupational Safety and Health Administration to make all the agency's regulations performance based and applicable to any industry group. You identified 50 external stakeholders who are active participants in this process, and 30 who are interested but not active, along with 75 interested internal stakeholders. Initially, when you and our team identified these stakeholders, you used—
- Brainstorming
 - Documentation reviews
 - Questionnaires
 - Interviews
141. As a new program manager, your performance is evaluated according to the five domains in the Program Management Standard. One of the criterions in the governance domain is reviewing requests to initiate, transition, and close components. An example as to how you have met this criterion is by—
- Following the defined escalation path
 - Ensuring resources are expended effectively
 - Providing input from customers and component leaders
 - Having a comprehensive business case

142. Assume you are working in a company, CDE, which specializes in new product development. The CDE executives are concerned because its last two products in the on-line music industry were late to market, and by the time they were on the market, competitors had products out with more attractive features to customers. As a result, CDE is in jeopardy of losing its market share in on-line music for mobile phones and tablets and in games for these phones and tablets. You are now in process of working with your research and development team to determine a new product to propose to CDE's executives. Given the last two experiences, you believe you should include in your business case—
- Existing work under way
 - Benefit sustainment
 - High-level roadmap
 - Comparative advantage analysis
143. You are managing a program to develop a new source of energy in the extreme northern latitudes when solar power is not available. Working with your core program team and your program steering committee, you have identified a number of component projects. Your company has several key projects under way, and resources will be difficult to acquire for this new program. A key consideration is—
- The availability of key staff members
 - Your ability to negotiate with functional managers for the needed staff
 - Previous work by the staff as a successful team
 - The availability of off-shore employees to drive down costs
144. In your role of establishing this Masters of Science degree in Program Management, your benefit management plan includes both tangible and intangible benefits. You recognize the demand for the degree, and it in turn will lead to new income to the University. It also will enhance customer satisfaction with the University and will demonstrate to the overall project management community that it is following the trends in the profession. You expect a large number of people to enroll in the program based on the interest now in obtaining the PgMP® credential. You have seven projects in your program and are fortunate to have a PMO. You are preparing a defined set of reports in order that—
- There is an opportunity to publicize the program
 - People can see the overall program's health
 - Funding limits are not exceeded
 - The metrics you identified can be quantified easily

145. As you work on your program to improve the economic growth of your country, you are following a program management methodology that your agency's Center of Excellence in Program Management prepared. Your organization therefore in defining all program management activity as well as that for every deliverable and service realizes the importance of—
- Program infrastructure development
 - Benefit sustainment
 - Stakeholder engagement
 - Quality management
146. All programs involve change, but as a program manager, you know it is necessary to integrate the change that results from the program into the organization's processes. A flexible approach to change is needed that is adaptive. The key then in change management and stakeholder engagement is to—
- Consult stakeholders and involve them from the start
 - Concentrate first at the executive level with continuous involvement
 - Determine the level of complexity as some changes are extensive and involve multiple stakeholder groups
 - Determine the change cycle
147. You are the program manager to build and ensure the safety of a new coal mine. No new coal mines have been built in your country for decades, and previously coal mining was considered an unsafe occupation. Now, your President has stated coal mining will resume as there are many uses for coal within the country. You are the program manager for this new coal mine and have received federal funding for the work. The location has been determined, and people in the local area are excited that a new coal mine will be built. Many are looking forward to working there, and others have applied to work on the program, which is positive given the Federal government wants to provide as many jobs as possible from the local area. While your firm has developed coal mines in other countries, it represents a new initiative in this country. You have identified 12 components to be on your program and are now in the planning phase as your charter was approved. As you work to determine resource requirements, you should—
- Review historical information
 - Consider the availability of capable resources from the local area
 - Determine the total number of resources you will need across the 11 components
 - Consider the master schedule, which you were given to complete the program

148. As you work on this program to improve the economic growth of your country, you are using numerous contractors to assist you now that your program management plan has been approved, and you have 12 approved components. Several contractors are responsible for a complete component with oversight from the core team. Some contracts are administered at the program level. This means at the program level—
- Component managers coordinate or report deliverable information
 - Component managers report procurement results and closeouts
 - Contracts are transitioned to the components
 - The contract administration plan is followed
149. About ten years ago, your CEO declared the company, which was set up in different functional silos, would change to a management-of-projects approach, recognizing its business involved providing products and services. It was a major cultural change, and it took three years to change to the new approach. You later attended a seminar on program management and mentioned to your manager, who then informed the CEO, that greater benefits could be realized if programs were used when appropriate to deliver more benefits than standalone projects. You were then charged to review the inventory of existing projects to see if there were dependencies between any of them and to try program management. You identified four projects, and in discussions with your sponsor, you proposed two new ones that you felt would increase the benefits even more. Your business case, which included the two new projects, was approved by the CEO. You also proposed that you set up a program steering committee to help oversee the program with five key stakeholders as its members. This request was approved. You met with the component managers and their teams and explained why the program approach along with governance was being used so they would buy into it. Your program was a success, and you obtained your PgMP. Programs now are being used regularly. The next step is to
- Set up a portfolio organization in the company
 - Assess progress to date in programs and projects through a maturity assessment
 - Evaluate the usefulness of support systems and purchase one to aid in retrieving needed information quickly
 - Evaluate the governance processes to determine whether they are adding business value

150. As part of your stakeholder engagement activities, your core program team meets with each of the stakeholders you have identified as critical to program success. During these meetings, the team members assigned to work with specific stakeholders try to gauge their attitudes toward risk, identify their perceptions, and better understand how they might respond. This approach is especially useful to you as you—
- Analyze risks
 - Prepare the program's risk management plan
 - Determine stakeholder issues that may lead to risks
 - Prepare the stakeholder engagement plan
151. You are sponsoring a new program that will focus on a new product in which educators can immediately determine whether or not a student is plagiarizing, whether the student has cited the reference correctly, or whether it is an entirely new idea. The program will have a number of components and the planned components have interdependencies between them. In this program you want to evaluate its program objectives, and you realize you need to address a number of concerns to satisfy all the involved and committed stakeholders. One of these considerations in this situation is—
- Cultural considerations
 - Ethical concerns
 - Sustainability issues
 - Technological changes
152. You are the program manager for the next generation fighter jet. Part of your program will be funded by your own contracting organization as detailed in the contract's terms and conditions as the Air Force is committing to buy 100 of these jets once the program is complete. Most of the funding will be provided by the Air Force. You decided when you were appointed as the program manager and listed in the proposal to the Air Force that you would set up a program steering committee as it is a highly complex environment and listed in the proposal its members, including an Air Force representative as part of your management approach. You also outlined what responsibilities members of the steering committee would have. Since your program is going to be funded primarily by the Air Force, the steering committee is responsible for agreements to secure the funds but it—
- Must involve your organization's portfolio function
 - Is subject to regulations
 - May require an independent cost estimate
 - Requires the people who signed the contract from your organization and the Air Force to be on the committee

153. You have completed five of the seven projects in your program so far. In the last meeting with the Governance Board, when it was time to transition one of the projects, this meant it was then time to involve the person who would be program director and a couple of people for supporting roles. This project had outlined all the support tasks that needed to be done and included items such as the job descriptions for the program director and his or her staff members and methods to evaluate their performance. Now the director has been hired. You therefore should as a best practice—

- a. Involve the new director in all meetings with all stakeholders
- b. Ensure the new director understands the benefits of this program and how they will be sustained
- c. Ask the director to serve as the project manager for the two remaining projects on the program
- d. Ask the Governance Board to add the new director to be a member to oversee the remaining projects on the program

154. Finally, your program to rebuild the water desalination plant is complete. This program has been under way for more than five years. You had a number of leasing agreements on the program, and you are confident all of them have been closed successfully. You also had several subcontractors, and you have had reviews with each of them. You are meeting with your program steering committee to obtain approval for the final phase of the program. You have made a recommendation to the committee to close the program. The official decision is made by the—

- a. Executive director
- b. Program sponsor
- c. Program steering committee
- d. Head of the PMO

155. Your organization has just announced that funds will be cut by 10 percent. Even though you are still in the planning phase of your program life cycle, and your program is considered a high priority in your company's portfolio, unfortunately, your program is not exempt from these budget cuts. But, you do have an advantage because your executive team is interested in your program because it is required for your company's continued viability in its product line of state-of-the-art sport utility vehicles. Your executive team has mandated certain delivery dates, which you felt were feasible until these budget cuts were announced. Still, you must meet them, so you have prepared a new program roadmap and a new master schedule. You now must communicate these changes to your stakeholders. As the program manager, you—
- Are the champion for change
 - Should meet individually with your key stakeholders
 - Must provide consistent messages to all stakeholders
 - Empower the person listed in the stakeholder register to contact his or her stakeholders
156. In preparing your business case, you realized you had some positive stakeholders on your steering committee, but two members were negative, and one was neutral. Fortunately, the positive proponents prevailed, and your business case was accepted. But since your organization has less than 150 people, this same steering committee will serve as your governance board for your program. You need to make the two negative stakeholders at least neutral and make the neutral stakeholder at least positive. One way to build and maintain advocacy is to—
- Work closely with the positive proponents as they can then convince the other three members
 - Prepare a stakeholder management plan
 - Use interviews with all committee members to better understand their needs
 - Prepare a roadmap
157. As you are closing your program, you need to close a contract for a program-level contract that was set up to cover the requirements for any procurements by the components in your program. You should—
- Meet with each component manager
 - Determine if this contractor should be retained on the qualified seller list
 - Meet with each member of the contractor's team
 - Prepare a contract closeout report

158. You are the program manager at your University for the number one program in the portfolio. The Chancellor initiated it and wants to streamline operational and administrative procedures. For example, even if a student's grade needs to be changed for whatever reason, four different signatures are required. There also some duplicate places at the University to obtain help on an issue a student or a faculty member may have. If there is a vacant position at any level, three different committees make the decision, and the final most important one lacks subject matter experts on it. You are to look at these various activities plus many others and identify where you can streamline them, so you structured your program based on separate subject matter departments and other organization responsible for operations and administrative work. As well the staff members who support the Chancellor and his assistants work also is another component. In such a program you—
- Need active stakeholder involvement from each affected group
 - Must provide reports on your progress tailored to each group
 - May need to play a coordinator role in the process
 - May require you to be forceful and directive
159. You are a program manager under contract to a government agency that is responsible for issuing visas and passports. You have been working on this program for eight years and are responsible for all the information and telecommunications functions for the agency. Your company realizes this program is essential to its success, and this is the first time it has worked for this agency. Therefore, it established a governance structure to oversee the process. A best practice to follow as approvals for program changes are made is to—
- Maintain a record of the proposed change
 - Record the outcome in the knowledge management repository
 - Meet with your core team and project managers and inform them of the results of the program steering committee meeting
 - Meet with your program sponsor to discuss your next steps

160. Assume you have been maintaining a benefit register once your program's benefit management plan was prepared. Because of the importance of benefits management on programs, you are fortunate that a member of your core team has expertise in this area and have appointed her to serve as the business benefits manager of your program, working closely with the PMO in your company. She will work closely with you and the other core team members as she will be maintaining the register, preparing the benefit reports, and also conducting benefit reviews. One of the key purposes of the benefit reviews is to—
- Create benefit ownership
 - Address the risk of operational areas that fail to commit to the benefits
 - Establish an approach to prioritize benefits that are in the realization plan
 - Analyze planned versus actual benefits
161. During program definition even if you are working in a different area for your program, you can still benefit from—
- Expert judgment
 - Historical Information
 - Sensitivity analysis
 - Benchmarking
162. Assume you are preparing your program charter for a mentoring program you will manage to help attract and retain staff members in your company. The benefits to be delivered are improved morale, increased productivity, less reliance on contractors, and a culture that wants ideas from its staff. As you prepare your cost estimate for this program, which has three components, you should—
- Consider the program roadmap
 - Review the rough-order-of-magnitude estimate
 - Prepare a bottom-up estimate
 - Add a sufficient contingency to cover any unknown costs
163. Assume you are the program manager for a large-scale services contract with an insurance company. You will be managing a number of services for this company in your program that do not require insurance subject matter experts. This approach means your program will have the responsibility for financial systems, human resource systems, IT, and telecom as examples of components. An example of metrics to ensure the quality of your services is—
- A warranty agreement
 - Mean time between failures
 - Progress toward strategic goals
 - No defects during scheduled and unscheduled inspections

164. You are enjoying your work as the program manager for the new ice cream program for your Fortune 500 company, which is so well known around the world for its cereal products. All resources are being provided internally, and everyone on the team is signing a confidentiality agreement so competitors are not aware of this new program. However, already resources are scarce in the organization working on cereal products. You have prepared your schedule and in doing so assumed the needed resources would be available. However, in a meeting with your steering committee, you now realize you will need to do a lot of negotiating for resources. Fortunately, you have been successful and have three experienced project managers so far assigned who are supporting the three projects thus far in the program. You now need to—
- a. Recognize resource decisions are similar to the economics of supply and demand
 - b. Analyze risks to program deliverables because of resources
 - c. View potential resource shortfalls as an opportunity to mentor existing staff to serve in key program roles
 - d. Meet with each functional manager as well as with the procurement staff to obtain ideas as to how to proceed
165. You are working on your ice cream program for your Fortune 500 company, which is so well known around the world for its cereal products. Already resources are scarce in the organization working on cereal products, and you are having problems getting the resources you need. You prepared your schedule and in doing so assumed the needed resources would be available. Because of your work in program management, you recognize changes occur on programs, especially given that programs represent a change of some type. Therefore, you—
- a. Receive a weekly update from the component managers
 - b. Have component managers work to monitor slippages
 - c. Record each change request in a change log
 - d. Take corrective action whenever there is a variance

166. Your program to develop flying motorcycles to cause less traffic congestion on interstate highways has generated lot of interest in it when it was officially announced. However, while people external to the company are enthusiastic about it, you know there are some people internal to the organization who are not even aware of it. It may be because you and your team are not located at the corporate headquarters but are off site, so competitors and some internal people really are not sure what you are doing and how far along you are in completing the program. However, it is your responsibility to—
- Try to identify all internal stakeholders
 - Work with known stakeholders to consider all points of view
 - Describe to internal people why this program is important to the company's vision
 - Recognize you need support from each department in the company and work to attain it
167. Assume your organization, a leading manufacturer of subsidiary equipment for the military, has decided to manage programs rather than only individual projects. It also has decided to implement a more robust process to ensure programs are selected that are critical to the company, rather than the 'pet' projects that were pursued previously. You are the program manager for its first program. You need to demonstrate how your program implements your company's vision, which is to be the leader in this field, so you do so in your—
- Program organization chart
 - Program charter
 - Program strategic plan
 - Program management plan
168. Although your company has been active in project management for many years, it is relatively new to program management. You became certified as a PgMP® and suggested to your supervisor that two of your current projects would be better managed as a program and discussed why program management was more appropriate. One of the executives knew about the usefulness of governance and phase-gate reviews from his previous work in new product development, and he recommended all programs have a governance structure. Such a process now has been implemented. The effectiveness of the governance process is best handled through—
- Regularly scheduled reviews
 - Program performance reports
 - Formal gate review decision requests
 - Use of your program management plan

169. You know as a program manager that managing stakeholder expectations involves working closely to best understand their communications requirements. You and your team on the flying motorcycle program identified 50 key internal stakeholders. You realize their levels of interest, influence, and power will vary so you performed a communications analysis. You did so because—
- You want to recognize the company's organizational change management strategy
 - You want to make sure there are no surprises
 - You want to have readily accessible information on program status available
 - You want to accommodate their attitudes
170. Finally, your program to establish the Masters of Science degree in Program Management is complete. You have completed the transition plan to the program director and his staff, and people at the University are pleased with how you managed this program and achieved the benefits in your benefit delivery plan. To help future programs at the University, they asked you to identify what you believe is the value of benefits management. As a first step you suggest that—
- Each program has an individual on the core team that is responsible for the program's business benefits
 - Involving as many stakeholders as possible, both internal and external to the program, in the benefits identification process to help secure their buy-in to its goals and objectives
 - The program be set up with a viable business case that has a list of initial benefits to be achieved
 - Establish from the start of the program methods to use to measure each identified benefit and ways to track its achievement



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Answer Sheet for Practice Test 1

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
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82.	a	b	c	d

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165.	a	b	c	d
166.	a	b	c	d
167.	a	b	c	d
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Answer Key for Practice Test 1

1. a. Business case

The business case assesses the program's investment against its intended benefits. While it includes many items, a high-level risk and opportunity assessment is a key element as it then shows the organization's willingness to tolerate risk as it makes its investment decision concerning the program.

PMI®, *The Standard for Program Management*, 2017, 35

2. c. Work with your sponsor to transition this component

Since the component has reached the end of its life cycle or in situations where it met planned program milestones, the next step is for the program manager to collaborate with the sponsor to present a request to transition this component. This request then is presented to the program steering committee.

PMI®, *The Standard for Program Management*, 2017, 101

3. a. Stakeholder register

Stakeholder engagement and communications management are closely related. In working to prepare a communications plan for your program, a stakeholder register is another output from Communications Planning to show stakeholder information requirements.

PMI®, *The Standard for Program Management*, 2017, 60, 113

4. d. Inform the ABS point of contact about the testing center issue

As you are not yet certified as a PgMP®, and it was a contractual requirement to be certified, you need to inform the client. As part of the PMI® Code of Ethics and Professional Conduct, it is incumbent to act in a truthful matter and under fairness we must disclose any real or potential conflicts of interest to appropriate parties.

PMI®. PMI Code of Ethics and Professional Conduct. Available from <http://www.pmi.org>

5. d. Recognize it is a role of the Committee to endorse or approve program changes

It is unclear as to the program manager's authority level; regardless, it is a responsibility of the program steering committee to endorse or approve program recommendations and changes.

PMI®, *The Standard for Program Management*, 2017, 81

6. b. Business case

Programs are linked to the organization's strategic plan to help the organization achieve its strategic goals and objectives and balance resource use and maximize value. The business case is developed to assess the investment of the program against its intended benefits. In this situation, the resource management and compensation policy are examples of benefits of the program to consider when it is proposed to the Selection Committee.

PMI®, *The Standard for Program Management*, 2017, 35

7. d. It specifies methods to put in place, so the benefits are fully realized

One purpose of the benefits management plan is to document the activities to achieve the program's planned benefits. It thus defines how and when benefits are to be delivered, and the specific methods needed so the benefits are fully realized over time.

PMI®, *The Standard for Program Management*, 2017, 50

8. a. Serves as a baseline to guide the delivery of benefits

The benefits management plan is the baseline document that guides benefit delivery through program performance. It also includes a definition of the metrics and procedures to measure benefits.

PMI®, *The Standard for Program Management*, 2017, 50

9. d. Determine the optimal procurement options based on a wide variety of factors

Early procurement planning is key for successful procurement management. Make-or-buy decisions are business decisions that can have far-reaching impacts on any organization. The program manager reviews the program components and develops a plan to optimize procurements to meet program objectives and deliver benefits. It is important to address commonality for the various procurement options across the program's scope.

PMI®, *The Standard for Program Management*, 2017, 117

10. d. Communications strategy

Communications is at the heart of stakeholder engagement. The program manager engages stakeholders throughout the life of the program, with particular attention to the stakeholders with high power and interest as in this situation. The program manager then needs a communications strategy for each stakeholder in the stakeholder register that shows communications requirements.

PMI®, *The Standard for Program Management*, 2017, 66

11. c. Prepare a feasibility study

Program strategy alignment begins with a business case. The business case is a documented economic feasibility study so it is the first step in the process. It is used to show the validity of the program's benefits to be delivered and justifies how the expected outcomes would support the organization's strategic goals.

PMI®, *The Standard for Program Management*, 2017, 34

12. b. Program Financial Management

Environmental changes are critical, because they can affect the program financial management activities. It is necessary for the program's finances and expenditures to be within budget and controlled; these environmental changes could create changes to the budget baseline.

PMI®, *The Standard for Program Management*, 2017, 127–128

13. b. Establish a change management process

A change management process is necessary and includes items such as the approach to request change, assess its impact, determine an appropriate decision, communicate it, and obtain funding to do the work.

PMI®, *The Standard for Program Management*, 2017, 112

14. a. PWBS

The program work breakdown structure (PWBS) encompasses the total scope of the program and includes the deliverables to be produced by the components. It then is used to build realistic schedules, develop cost estimates, and organize the work.

PMI®, *The Standard for Program Management*, 2017, 123

15. c. Approve all five components at one time

This phase involves component initiating, change, transition, and closure. Each time a component is initiated, for example, requires a meeting with the sponsor or customer and then is followed with a request for approval by the program steering committee. By initiating all five components at once, this process is shortened with a single meeting and a single request.

PMI®, *The Standard for Program Management*, 2017, 100–101

16. b. Update the roadmap

Planning is an iterative process. As the benefit management plan is updated, the program roadmap also should be updated especially since among other things the roadmap describes incremental benefit delivery as applicable.

PMI®, *The Standard for Program Management*, 2017, 50

17. a. Enables a focus on program continuation

Phase-gate reviews are conducted at the end of a phase, and the program steering committee then decides whether to continue to the next phase, to continue with modifications, or to end either the program or a component.

PMI®, *The Standard for Program Management*, 2017, 75

18. b. Prepared a roadmap

This program will last a long time. The roadmap is a chronological representation, shown graphically, of the program's intended direction and shows dependencies between major milestones and decision points. It then reflects the link between the business case and the program's work.

PMI®, *The Standard for Program Management*, 2017, 36

19. c. Repeat the program formulation phase regularly

Formulation involves translating strategic objectives to program outcomes, appointing a sponsor, and a program manager. However, since budgets tend to exceed their allotted allocation, as the program manager, program formulation should be repeated at regular intervals during the program. It is iterative and enables the program manager to redefine the program more definitely to best define the program's ultimate business value.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 138

20. a. Some projects may need to be integrated with others to provide program benefits

Programs often begin as the organization realizes ongoing projects, programs, and other work are related as they are pursuing common outcomes, capabilities, objectives, or benefits. Then, a program is established as it is recognized by grouping these activities as a program greater benefits and effectiveness will result than if they continued to be managed in a standalone way.

PMI®, *The Standard for Program Management*, 2017, 7

21. c. Set change thresholds in your change management plan

The change management plan includes change thresholds in which the types of changes the program manager can determine whether to approve his or her own are defined, and the types of changes that require escalation are defined.

PMI®, *The Standard for Program Management*, 2017, 112

22. c. The need for you to determine how to allocate this key resource

It is the responsibility of the program manager to determine how resources will be allocated across components, so they are not overcommitted and to ensure inadequate support does not occur. The resource management plan serves among other things to describe guidelines to resolve resource conflicts as in this situation.

PMI®, *The Standard for Program Management*, 2017, 119

23. c. Hold a presentation

Periodic reports and presentations are outputs from Program Reporting. Information on status and progress must be communicated to stakeholders through the information distribution process to provide stakeholders with status and deliverable information. The purpose of reporting and presentations is to present a clear picture of the entire program.

PMI®, *The Standard for Program Management*, 2017, 127

24. b. It is useful to set processes that can be applied across phases

In program life cycle management, the purpose is to manage program activities and facilitate program definition, program delivery, and program closure; therefore, it is useful to establish a common and consistent set of processes to apply during these phases, which sometimes overlap.

PMI®, *The Standard for Program Management*, 2017, 89

25. b. Model the stakeholders' expected benefits

The benefits breakdown structure is established in a similar way to the program work breakdown structure. It models the expected benefits of stakeholders in a way that represents their collective view of the situation. At the highest level are strategic objectives, and at lower levels there are benefits, outcomes, and outputs or deliverables. It thus provides a hierarchical view of expected benefits.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 156–159

26. a. Demonstrate an understanding of the needs of the customer

Organizations first build strategy as to how to achieve their vision. When the strategic planning is complete, the strategic goals and objectives are documented in the strategic plan. The strategic plan is subdivided into a set of organizational initiatives that are influenced by several factors - one of which is customer and partner requests. In this situation, the customer requests would be highlighted in the business case.

PMI®, *The Standard for Program Management*, 2017, 35

27. c. Determine whether changes are required to components

The benefits management plan is used by program governance for a number of reasons. The Governance Board is interested in determining if benefit achievement is occurring as planned or whether changes are needed to the components or the program.

The Standard for Program Management, 2017, 52

28. d. Assigned by the program sponsor

During program formulation, the program sponsor is selected, and he or she assigns a program manager to conduct and manage the program.

PMI®, *The Standard for Program Management*, 2017, 92

29. b. Ensuring team members have a clear understanding as to how their work contributes

In this performance criterion, team members need to recognize how their activities contribute to overall program success. Other examples are for the program manager to give presentations with practical and understandable information about the program's vision, mission, and strategic value and to encourage team members to present voluntarily feedback as to how to better align their activities with the program's strategic value during planned and ad hoc review meetings.

PMI®, *Project Manager Competency Development Framework*, 2017, 134

30. a. Document the rationale for the decision

In Program Scope Monitoring and Controlling, a change management activity is established. As an output, the disposition of the request and the rationale of the decision are determined, and the change request and supporting detail are recorded.

PMI®, *The Standard for Program Management*, 2017, 137

31. c. Make them readily accessible for continuous learning

A final lessons learned report should be prepared by the program manager, which incorporates individual findings since lessons learned are captured throughout the program. It should be available as part of knowledge transfer to inform others and help them avoid pitfalls encountered during program delivery.

PMI®, *The Standard for Program Management*, 2017, 139

32. b. Realize the full suite of components may not be known

Programs have a degree of uncertainty as in this situation. Since even in the program delivery phase the entire number of components may not be known, the program manager oversees the components in this phase, and if required, then accommodates needed change through adaptive change by re-planning their proper integration or realigning the components.

PMI®, *The Standard for Program Management*, 2017, 95

33. c. Take corrective action

Bad debt is money that is not collectible and is therefore worthless. As a result, it is deemed an expense to the business rather than revenue because the business incurred the expense of providing a service or product for which it was not paid. In response to this problem, you need to take corrective action, which is an output of Program Financial Management.

PMI®, *The Standard for Program Management*, 2017, 128

34. a. What are the assumptions that are part of your analysis?

Assumptions are factors considered to be true, real, or certain.

Assumption analysis affects all aspects of the program but are identified as the business case is being prepared and are included in the business case. These assumptions should be validated before the business case is presented.

PMI®, *The Standard for Program Management*, 2017, 35

35. c. Identify intrinsic and extrinsic benefits

The business case assesses the program's balance between costs and benefits. The cost/benefit analysis should answer questions such as how much will the program cost to implement, how much work the program will contribute to the bottom line, and is the program worth investing in terms of achievement of specific business objectives. It includes intrinsic and extrinsic benefits.

PMI®, *The Standard for Program Management*, 2017, 35

36. b. Correspond with biased team members to show how you explained and demonstrated the value of the program's outcome

This approach is an example of using objectivity to build team consensus as through correspondence with team members who are biased shows how the program manager explained and demonstrated value to the organization and the individual team member of the program's outcome.

PMI®, *Project Manager Competency Development Framework*, 2017, 145

37. b. Stakeholder register

Stakeholder identification identifies stakeholders or stakeholder groups and lists them in a stakeholder register. This register is established and maintained so the program team can use it for reporting, distributing program deliverables, and providing formal and informal communications.

PMI®, *The Standard for Program Management*, 2017, 60

38. b. Requesting a quality assurance audit

As the products are not passing inspection, a quality assurance audit may be useful to assess the quality control results of the components and to see if overall program quality is being delivered.

PMI®, *The Standard for Program Management*, 2017, 132

39. a. Revisit and update your program documentation as required

Planning is an iterative process. When components are initiated or terminated, all program-level documentation associated with the component needs to be updated to reflect changes.

PMI®, *The Standard for Program Management*, 2017, 77

40. b. Whether the window of opportunity was compromised

Program Benefits and Program Governance are closely linked. The Governance Board, among other things, focuses on benefit delivery and ensuring programs deliver promised benefits. It, along with the program manager and other key stakeholders, may determine the window of opportunity was compromised by actual events in the program, one of which is feature or scope reductions. Investments have time value, and shifts in component schedules may have additional financial impact.

PMI®, *The Standard for Program Management*, 2017, 52

41. c. Revisit the program master schedule

The program master schedule should be reviewed to assess the impact of component changes such as missing a key milestone on the other components and on the program itself. There may be a need to accelerate or decelerate components in the schedule to meet goals. Early identification of slippages such as this one is critical.

PMI®, *The Standard for Program Management*, 2017, 136

42. c. Be a facilitator between the two groups

Program managers should be in a facilitator role with both the sponsor and the users in any program. The facilitator role balances alignment with program expectations and the ability to achieve them. As the program manager, it is incumbent to alert the sponsor of any discrepancies with any stakeholder group and the consequences as the program manager is responsible for delivering benefits in a timely way.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 100

43. a. Roadmap

The roadmap is an important document that is used throughout the program. In Program Strategy Alignment, it is prepared for a variety of reasons among which is to establish the relationship between the program activities and the expected benefits.

PMI®, *The Standard for Program Management*, 2017, 37

44. b. Defining changes the program manager can resolve

Governance has a key role in authorizing program changes. The program steering committee defines the types of changes the program manager can independently authorize and approve and determines those that are significant enough to warrant more discussion before a decision is made.

PMI®, *The Standard for Program Management*, 2017, 74

45. a. Assign program roles and responsibilities

Resource prioritization is a key responsibility for the program manager, and resource use across components must be optimized. A human resource plan is useful to identify, document, and assign program roles and responsibilities to individuals and groups.

PMI®, *The Standard for Program Management*, 2017, 133

46. c. See if residual activities are required

Before closing a program, estimates may be needed to determine costs of sustaining the program's benefits. Residual activities may be required to oversee the ongoing benefits.

PMI®, *The Standard for Program Management*, 2017, 139

47. b. Activities about stakeholder engagement

Stakeholder engagement consumes time, and it often occurs at set times with meetings with different stakeholder groups; these activities are part of the program master schedule.

PMI®, *The Standard for Program Management*, 2017, 121

48. d. Program stakeholder engagement

In program stakeholder engagement, the program manager requires negotiation skills. Large programs with diverse stakeholders may require facilitated negotiation sessions when expectations conflict.

PMI®, *The Standard for Program Management*, 2017, 65

49. a. Prepare an initial risk assessment

Risks are inherent in any program, and high-level risks are part of the program's business case. The initial risk assessment identifies risks to organizational strategy alignment, and high-level risks are in the business case, which is updated throughout the program. If a large number of risks are identified, the program should not be funded. If only a few risks are identified, it shows the program is in alignment with the organization's strategy and should be funded and continue to be funded unless the strategy changes dramatically.

PMI®, *The Standard for Program Management*, 2017, 42

50. c. Preparing your master schedule

When a program is established as in this situation from existing components, the master schedule then incorporates milestones and deliverables from individual component schedules.

PMI®, *The Standard for Program Management*, 2017, 121

51. d. The strategic alignment

During benefit delivery, programs are reviewed. In this situation, a key focus is on strategic alignment focusing on the link between the organization and program plans; defining, maintaining, and validating the programs' value proposition; and aligning program management with enterprise operations.

PMI®, *The Standard for Program Management*, 2017, 52

52. c. Prepare a stakeholder register

In program stakeholder identification, stakeholders are identified and analyzed to prepare a stakeholder register. The register uses detailed stakeholder analysis as it is prepared to list the stakeholders, their level of influence in the program, communications preferences, and other relevant information.

PMI®, *The Standard for Program Management*, 2017, 60

53. d. Release resources when they are no longer needed

In Resource Interdependency Management, the program manager controls the schedule for scarce resources. In all programs, and especially in the one described here, the program manager must ensure resources are released for other programs when they are no longer needed on the current program.

PMI®, *The Standard for Program Management*, 2017, 133

54. a. Stated as an assumption the excellent weather in your city and numerous tourist attractions and hotel availability

An assumption is a fact that is real and certain. In this situation, data can be made available to show weather trends, tourist attractions, and hotel accommodations for this event.

PMI®, *The Standard for Program Management*, 2017, 93

55. b. Determine its key parameters

The business case is developed to assess the investment for the program against its intended benefits. It usually describes the key parameters to assess the objectives and constraints for the proposed program.

PMI®, *The Standard for Program Management*, 2017, 35

56. c. Use a program work breakdown structure

Because the PWBS reflects the total scope of the program, it encompasses all benefits to be delivered by the program, including the deliverables produced by the components.

PMI®, *The Standard for Program Management*, 2017, 123

57. d. Use open-ended questions

Regardless of the technique used, the best approach is to use open-ended questions to obtain as much information as possible and to solicit stakeholder feedback.

PMI®, *The Standard for Program Management*, 2017, 62

58. c. Program sponsor

The program sponsor is the individual or group who provides resources and support for the program and is accountable for enabling success.

PMI®, *The Standard for Program Management*, 2017, 61

59. d. You need to plan when meetings will be scheduled

Since the members of this committee are high-ranking officials or for any program steering committee, scheduled times for meetings such as phase-gate and decision-point reviews, health checks, and any required audits are needed in advance to ensure the people are available to participate.

PMI®, *The Standard for Program Management*, 2017, 71

60. d. Initiate component requests

Since the program management plan has been prepared and formally approved, the program now is in the Program Delivery Management Phase. During this phase, components are planned, overseen, integrated, and optimized to facilitate benefit delivery. The program manager first must present a request to initiate each component to the program steering committee.

PMI®, *The Standard for Program Management*, 2017, 100

61. b. Meet with stakeholders

After the benefit register is set up, it should be reviewed with key stakeholders to develop the appropriate performance measures for each benefit. These key performance indicators become part of the register for the program.

PMI®, *The Standard for Program Management*, 2017, 47

62. d. Using a comparative advantage analysis

In this situation a comparative analysis for a business case can consider whether there are competing efforts under way by others or already in the marketplace. It may also include ‘what-If’ analysis to show how the program’s objectives and intended benefits could be achieved in other ways.

PMI®, *The Standard for Program Management*, 2017, 39

63. b. Work to ensure the component managers are collaborative

A program manager has a difficult task to manage the component managers. However, the program manager and the core team need to engage the component managers. Program managers need to empower these experienced component managers who tend to have their own successful ways of managing a project. Each component should have a well-defined scope before work is done on it. Since component managers are results oriented, it is difficult for many to collaborate. Thus, the program manager and core team must convince the component managers to become collaborative and support program goals.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 228-229

64. a. Root-cause analysis

Stakeholder metrics are included in the stakeholder engagement plan. Program managers need to review metrics regularly to identify potential risks caused by lack of stakeholder participation. Trends and root-cause analysis are used.

PMI®, *The Standard for Program Management*, 2017, 65

65. c. Appoint the program manager

During the program formulation sub-phase, the sponsoring organization appoints a program sponsor to oversee and govern the program. Next, the sponsor appoints the program manager who conducts and manages the program.

PMI®, *The Standard for Program Management*, 2017, 92

66. a. Endorsing or approving recommendations for programs

Program governance covers systems and methods by which programs and its strategy are defined, authorized, monitored, and supported by the organization. It ensures programs are managed effectively and consistently. The program steering committee is charged to endorse or approve recommendations made regarding a program under its authority.

PMI®, *The Standard for Program Management*, 2017, 67

67. b. The benefit register

The benefit register lists the planned benefits and is used to measure and communicate the delivery of the benefits during the program. Among other things, it includes derived key performance indicators and thresholds to evaluate their achievement.

PMI®, *The Standard for Program Management*, 2017, 47

68. c. Upgrading the nation's airspace system

An upgrade to the nation's airspace system would consist of numerous projects, subsidiary programs, and program activities. By managing them in a coordinated way, then you would obtain greater benefits than if they were managed individually.

PMI®, *The Standard for Program Management*, 2017, 3

69. a. Have a quick response plan for schedule changes

The program manager and the core team must work actively to prioritize resources across components. They need a flexible resource loading plan, a way to continuously update and prioritize resources, secure commitment of resources at scheduled times, and a capability to rework activities around key resources with a quick response plan if there is unavailability of resources or changes in the schedule.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 219

70. d. Conduct a thorough analysis of the situation

It is easy to assume the lack of participation is a problem when it may be that these stakeholders are confident with the program's direction. Through analysis avoids incorrect assumptions about stakeholder behavior that could result in a poor or ineffective decision.

PMI®, *The Standard for Program Management*, 2017, 65

71. a. Escalate the issue first to the steering committee

An issue escalation process should be included in the governance plan. There are times when the program manager may need to contact an executive or an external stakeholder, and information obtained should then be provided to the committee. The governance plan defines expectations for issue escalation at all levels including when to engage stakeholders for effective issue resolution.

PMI®, *The Standard for Program Management*, 2017, 73

72. c. Update the business case

As the program manager, you work with the sponsor and the sponsoring organization to initiate studies and estimates of scope, resources, and costs; develop an initial risk assessment; and develop a program charter and roadmap. Since the business case was developed before program formulation, it may be revised and updated as needed.

PMI®, *The Standard for Program Management*, 2017, 92

73. a. Poor performance

Programs may be canceled because of poor performance or changes to the business case that make the program unnecessary. This is a result of poor performance since the competitor's product is on the market.

PMI®, *The Standard for Program Management*, 2017, 102

74. a. It approved the quality approach

The program steering committee reviews and approves the quality management approach. It also is responsible for reviewing and approving the standards that determine how quality will be measured.

PMI®, *The Standard for Program Management*, 2017, 74

75. c. Maintain visibility so the budget is used to obtain program benefits

During Program Contract Administration once agreements are signed for many contracts, component managers are responsible for contract administration and closeout. However, the program manager is visible during contract administration to ensure the program's budget is spent properly to obtain program benefits.

PMI®, *The Standard for Program Management*, 2017, 131

76. a. Portfolio manager

The portfolio manager is the person or group responsible to establish, balance, monitor, and control portfolio components to achieve strategic business objectives.

PMI®, *The Standard for Program Management*, 2017, 61

77. b. Resource use

Program performance reports include a clear picture of the entire program, status and deliverable information, and resource use to deliver program benefits.

PMI®, *The Standard for Program Management*, 2017, 127

78. b. Communicate program benefits

Interacting and engaging with stakeholders is part of stakeholder engagement and enables the program manager to communicate program benefits and their relevance to the organization's strategic plan. Often, the program manager uses strong communications, negotiation, and conflict resolution skills to do so such that stakeholder opposition to the program is defused.

PMI®, *The Standard for Program Management*, 2017, 65

79. c. Define and establish governance for the program

Typically, the first step is to assess the current governance that applies to the program, determine the program's governance needs, and define the governance structure and membership. In this situation, since governance is a completely new concept, the program manager, working with a sponsor if one exists, should define and establish governance for the program.

PMI®, *Governance of Portfolios, Programs, and Projects: A Practice Guide*, 2016, 89

80. a. It assesses the program's progress toward realizing its expected benefits

While the roadmap is a chronological representation of the program's events, it also reflects the pace of which benefits are realized since programs are established to deliver more benefits than the components in them if the components were managed as standalone projects. Since this is an internal program, benefits will be realized incrementally.

PMI®, *The Standard for Program Management*, 2017, 37

81. c. The operational costs

As part of Program Financial Management, it is necessary to manage the expenditure on the program's infrastructure. These costs cannot be overlooked, and it is necessary to ensure they are within expected parameters.

PMI®, *The Standard for Program Management*, 2017, 128

82. a. The ability of the organization to absorb the change

Several factors drive probability, and they include the number of components needed to realize the benefit, or the ability of the organization to absorb the change and sustain it.

PMI®, *The Standard for Program Management*, 2017, 45

83. b. Defining quality standards

There are many varieties of PMOs, and they provide support to program managers in different areas, one of which is defining the program's quality standards and the quality standards for the program's components.

PMI®, *The Standard for Program Management*, 2017, 20

84. a. It is time to establish the program's steering committee

The governance function then is defined by the functions required with a focus toward empowerment rather than control, both individual and team accountability or program success, a stakeholder perspective considering stakeholder diversity, and a top-down and bottom-up vision of governance.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 178

85. b. Program scope is typically described in terms of expected benefits

Programs are established to attain more benefits than if their components were managed in a standalone way. Program scope typically is described in terms of the expected benefits as it encompasses all the benefits the program is to deliver, reflected in the PWBS. Scope also can be described as user stories or scenarios depending on the type of program.

PMI®, *The Standard for Program Management*, 2017, 123

86. d. Spend time and energy with known stakeholders

Different stakeholders will have different views of the program, and their level of influence will vary. The program manager must spend time and energy with known stakeholders to ensure all points of view are considered and addressed. He or she assesses their attitudes and interests to help determine readiness for changes from the program.

PMI®, *The Standard for Program Management*, 2017, 59

87. b. Program reporting and control

A best practice followed by many organizations is to define standardized monitoring and control processes applicable to all programs. The program steering committee then assumes compliance with these processes. An example is known program risks, their response plans, and escalation criteria.

PMI®, *The Standard for Program Management*, 2017, 73

88. d. Program D

The payback period can be determined by dividing the initial fixed investment in the program by the estimated annual net cash inflows. In this example, the payback period for Program D is 2.5 years, so it should be selected. Funding is an environmental factor, and financial analysis is included in the business case.

PMI®, *The Standard for Program Management*, 2017, 35, 38

89. d. Have the first draft of the program schedule identify the start and end dates of the components

The first draft of the program's master schedule often identifies only the order and start and end dates of components. Then, component results can be added as their schedules are developed.

PMI®, *The Standard for Program Management*, 2017, 121

90. c. Let the client know you are aware of this issue and are working to balance the program's needs with resource availability

It is the program manager's responsibility in Program Resource Management to optimize resource use across program components. The program manager balances the needs of the program with resource availability.

PMI®, *The Standard for Program Management*, 2017, 133

91. c. Manage a component steering committee

While some organizations use the same program steering committee for the program and its components, others have the program manager assume responsibility for the governance function for the program components. Factors to consider if the program manager is to assume this responsibility include the experience of the program manager and the degree of autonomy the program manager is granted by the steering committee.

PMI®, *The Standard for Program Management*, 2017, 84

92. a. Although the program is over budget, the overrun is insignificant at this time

The cost variance (CV) is calculated by subtracting the actual cost (AC) from the earned value (EV); that is, $CV = EV - AC$, or $\text{€}42,000 - \text{€}50,000 = -\text{€}8,000$, which is insignificant compared to the budget at completion (BAC).

PMI®, *The Standard for Program Management*, 2017, 128

PMI®, *PMBOK® Guide*, 2017, 262

93. d. Involve the manufacturing and operations managers

This decision by the program steering committee shows the need to involve other stakeholders in the governance function. The manufacturing manager becomes a key stakeholder with the loss of these resources, and the operations manager also is a key stakeholder since he or she will be integrating the new capabilities from the program into daily work and must be managed carefully to avoid significant disruption.

PMI®, *The Standard for Program Management*, 2017, 85

94. a. Analyze the strategic plan

Organizations have a strategy to show how their vision will be achieved. When the strategic planning cycle is finished, the strategic goals and objectives are created and/or updated and documented in the strategic plan. It then is subdivided into a set of organizational initiatives that may then be grouped into portfolios. Programs then are formally evaluated, selected, and authorized based on their alignment and support to achieve the strategic plan's goals and objectives. Programs are designed to align with the organizational strategy and to facilitate realization of organizational benefits; benefits can best be realized through programs rather than if their components were managed individually.

PMI®, *The Standard for Program Management*, 2017, 33, 35

95. c. All available financial information and all income and payment schedules are listed in detail as the budget is prepared

In developing the budget, it is necessary to compile all available financial information and list all income and payment schedules in sufficient detail. By doing so, the program's costs can be tracked as part of the program budget.

PMI®, *The Standard for Program Management*, 2017, 115

96. a. Prioritize objectives and delineate benefits

The value management approach engages key stakeholders in the decision-making process. It is an agile concept and helps focus the team on finding alternatives that generate the best value – the lowest use of capabilities with the closest alignment with expectations. In a value management approach, facilitated creative open workshops and meetings often are used.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 154–155

97. d. The EPMO provides documents and knowledge transfer support

Although it is not providing knowledge transfer support at this time, doing so is an established function of PMOs (or in this case the EPMO) to support program managers.

PMI®, *The Standard for Program Management*, 2017, 20

98. b. Program scope

The program manager needs to monitor and control scope as the program develops. The purpose is to ensure successful completion and benefit delivery. Scope changes with a significant impact on the program or on a component may originate or may be due to stakeholders, previously unidentified requirements, or external sources.

PMI®, *The Standard for Program Management*, 2017, 137

99. c. Group C

Using net present value (NPV) as a selection criterion, a dollar a year from now is worth less than a dollar today. The more the future is discounted (that is, the higher the discount rate), then the lower the NPV of the program. If the NPV is higher, then the program is rated higher than others. In this example, Group C has the highest NPV and should be selected.

PMI®, *The Standard for Program Management*, 2017, 35, 38

100. b. Your program steering committee will grant you a large amount of authority

The program charter Is used to give the program manager the authority to apply resources to program activities. The program steering committee grants program managers with expertise more autonomy and authority to do so and to make more program decisions without further consultation.

PMI®, *The Standard for Program Management*, 2017, 86, 92-93

101. a. Generate the program schedule

Upon completion of the PWBS, realistic schedules can be built, cost estimates can be developed, and the program's work can be organized.

PMI®, *The Standard for Program Management*, 2017, 123

102. b. The benefits analysis and planning phase and benefits delivery phase activities are performed iteratively

In the program benefits delivery phase benefits are monitored and managed, and the components are planned, delivered, integrated, and delivered. However, if corrective action is needed, then the program delivery phase is performed iteratively with the benefits analysis and planning phase to achieve planned benefits.

PMI®, *The Standard for Program Management*, 2017, 45

103. c. Program Performance Monitoring and Controlling

These activities are performed throughout delivery management by the program manager and component management organizations. They include collecting, measuring, and disseminating performance information and assessing program trends.

PMI®, *The Standard for Program Management*, 2017, 101

104. b. Focus groups

Focus used to solicit feedback from stakeholder groups regarding their attitudes to better understand the organization culture, politics, concerns, and the overall impact of the program. Open-ended questions help participants to interact with one another, thus resulting in a deeper understanding of program needs.

PMI®, *The Standard for Program Management*, 2017, 62

105. c. Integrates the program's subsidiary plans

The program management plan integrates the program's subsidiary plans. It also establishes management controls and is the overall plan to integrate and manage the program's components.

PMI®, *The Standard for Program Management*, 2017, 94

106. a. Checklists are completed

Program quality control consists of monitoring components and deliverables to determine if they fulfill quality requirements that lead to benefit realization. It is performed throughout the program. An output is a completed quality checklist.

PMI®, *The Standard for Program Management*, 2017, 132

107. a. Inform the sponsor in MNO

As a practitioner in program/project management, we need to make decisions and act in an impartial and objective way. In this situation, it is necessary to take corrective action and avoid a conflict-of-interest situation.

PMI®. *PMI Code of Ethics and Professional Conduct*. Available from: <http://www.pmi.org>

108. b. Use the customer feedback to support program governance and stakeholder engagement

Customer feedback requests are an output of Program Reporting. This situation shows customers are dissatisfied. However, program reporting is critical in program management. It consolidates information as to how resources are being used to deliver program benefits and supports both program governance and stakeholder engagement. The program manager needs to meet again to ensure these stakeholders are receiving the information they need.

PMI®, *The Standard for Program Management*, 2017, 127

109. a. Organizing documents and archiving them for other purposes

You are in the closing phase and working in Program Information Archiving and Transition. As you collect program records, you are organizing them for use throughout the organization. You also are collecting and archiving component records and documents.

PMI®, *The Standard for Program Management*, 2017, 139

110. d. Maintain a benefits register

A benefits register is a best practice and can be easily translated into a benefits report. It is useful to report the benefits and their status to stakeholders.

PMI®, *The Standard for Program Management*, 2017, 47, 50

111. a. Identifying high-level risks

Identifying high-level risks is done soon after the program manager is appointed. He or she works with the sponsoring organization to do so to analyze threats and opportunities. It helps in determining the program's successful delivery of benefits and to identify risk response strategies and plans.

PMI®, *The Standard for Program Management*, 2017, 92

112. d. Program Delivery

This phase is where program components are authorized, planned, integrated, and recommended for component transition and closure.

PMI®, *The Standard for Program Management*, 2017, 95

113. d. Update the PWBS

Working in Program Scope Monitoring and Controlling, there are a number of key activities including establishing an activity to administer scope changes. An output of this process is to update the PWBS.

PMI®, *The Standard for Program Management*, 2017, 137

114. b. Aggregate information across projects, subsidiary programs, and program activities

Program Performance Reports aggregate all performance information for all program work. The reports consolidate performance data to provide stakeholders with information regarding the use of resources to deliver program benefits.

PMI®, *The Standard for Program Management*, 2017, 127

115. c. The organization's strategic goals would change, but the program managers were not aware of the changes

Organizations face numerous complexities and challenges, which lead to changes in its strategic goals and objectives, but often program managers are unaware of these changes unless there is close collaboration with the portfolio managers. To ensure programs remain in alignment with the organization's strategic goals, they need know about these changes to see whether new projects should be added to the program, and other projects terminated if they do not support the new strategy.

PMI®, *The Standard for Program Management*, 2017, 12, 33

116. a. Reallocate resources among components

Resources working on the components are less than the total resources needed to complete the program. This situation is one in which each time a component completes its work, the program manager can reallocate resources to other components in the program.

PMI®, *The Standard for Program Management*, 2017, 119

117. d. Quantify incremental delivery of benefits

Quantification of incremental delivery of benefits is necessary to enable the full realization of planned benefits to be measured during the program. The program manager and other stakeholders use these meaningful metrics to determine if benefits exceed their control thresholds and are delivered in a timely way.

PMI®, *The Standard for Program Management*, 2017, 48

118. d. Guide the delivery of benefits as the program progresses

While the benefits management plan has many purposes, it serves as the baseline document, so it can guide the progress in delivering benefits as the program progresses.

PMI®, *The Standard for Program Management*, 2017, 50

119. c. Need to mitigate any negative consequences that may affect benefit delivery

During program delivery, risk identification, risk analysis, and risk response management are paramount to overall success. In developing risk responses, the program manager identifies and directs actions to mitigate any negative consequences that may affect potential benefit realization. He or she also may hold contingency reserves to support risk responses if required.

PMI®, *The Standard for Program Management*, 2017, 135

120. a. Work with your sponsor to prepare a request to transition the three components

When components are at the end of their life cycles, the program manager then collaborates with the sponsor to prepare a request to close or transition the components. Since this situation is an internal program, a transition request is appropriate, which is a formal request, and it is sent to the program steering committee for approval.

PMI®, *The Standard for Program Management*, 2017, 101

121. c. Establish governance as a networked approach to best create and realize value

The majority of program steering committees focus on active controlling and monitoring. A value creation governance approach can focus on building innovative capabilities and sustained relationships. To do so, a culture change by the governance board focusing on collaboration is required with a view of involving stakeholders to craft the program's vision, mission, and support to execute it. Strategy then defines the execution of the program with empowerment and delegation to the program team.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 92–93

122. d. Integration

A successful program manager must identify program outputs and outcomes so benefits are aligned with the organization's strategic goals and objectives.

PMI®, *The Standard for Program Management*, 2017, 17

123. b. The benefits are aligned with the University's strategic objectives

Strategic alignment is critical to be able to provide an integrated view of how outputs and outcomes of component support delivery of organizational benefits.

PMI®, *The Standard for Program Management*, 2017, 33

124. b. Opportunity

Benefits realization requires analysis throughout the program. This scenario is an example of an opportunity. Opportunities optimize benefit delivery and need to be identified, refined, and quantified.

PMI®, *The Standard for Program Management*, 2017, 49

125. c. Are expressed in policy statements

Risk profiles are used to construct the most suitable approach to managing program risks, adjusting risk severity, and monitoring risk criticality. Risk profiles may be expressed in policy statements or revealed in actions.

PMI®, *The Standard for Program Management*, 2017, 120

126. a. Stakeholder engagement

Stakeholder engagement provides a list of those stakeholders who should be engaged and receive communications during the program about governance activities. Many stakeholders will have an interest in the steering committee, and only a few are on the committee so engagement with those other stakeholders with interest in or influence over program activities is needed.

PMI®, *The Standard for Program Management*, 2017, 71

127. d. Prepare component initiation requests

A number of activities are required to verify the component supports the program's outcomes before it is authorized; each component requires an initiation request, which is evaluated by the program steering committee.

PMI®, *The Standard for Program Management*, 2017, 100

128. b. Update your program resource plan

Resource prioritization decisions are based on guidelines in the program resource management plan. As changes to components, such as initiating or terminating, may have impacts on program resources, updates to the resource plan may be needed; an output of Program Resource Management.

PMI®, *The Standard for Program Management*, 2017, 133

129. d. Gain and maintain their buy in to program benefits

Gaining and maintaining their buy in is essential to the program's objectives, benefits, and outcomes.

PMI®, *The Standard for Program Management*, 2017, 57

130. a. Develop social groups

Social groups are an example of a sensemaking activity. They are not digital networks but instead are used to enable people to connect with one another. The objective is for stakeholders to assimilate the impact of changes from the program as they are actively engaged in it.

PMI®, *Managing Change in Organizations: A Practice Guide*, 2013, 87–88

131. b. Program B

Programs should have a strategic fit with the organization's long-term goals. In selecting a program to pursue, this is one area to consider. In this example, Program B fully supports four of the five goals.

PMI®, *The Standard for Program Management*, 2017, 35

132. d. Determine minimal acceptance criteria

The program steering committee establishes the minimal acceptance criteria for a successful program and the methods to use to measure, communicate, and endorse these criteria.

PMI®, *The Standard for Program Management*, 2017, 72

133. c. Stakeholder Engagement

Stakeholder engagement requires the program manager to be an excellent communicator. The program manager collects stakeholder issues and concerns and manages them to closure. He or she uses an issue log to document, prioritize, and track issues, which helps the program team understand stakeholder feedback.

PMI®, *The Standard for Program Management*, 2017, 65

134. a. Identifying impacts to the components from overruns or underruns

In Program Financial Management, the program manager must be proactive in identifying factors that create changes to the budget baseline. Another example of being proactive is to identify impacts from components from overruns or underruns. Throughout the program If changes are made with a significant cost Impact, the program's budget baseline is updated and is rebaselined. All approved changes to the program or a component are incorporated into the budget.

PMI®, *The Standard for Program Management*, 2017, 128–129

135. a. The program sponsor

Governance structures differ based on numerous factors with the purpose to monitor and review the progress of the program and delivery of the benefits from the project and non-project work. The program sponsor typically is an executive with a senior role in the organization. In many organizations, the program sponsor is the chairperson of the program steering committee.

PMI®, *The Standard for Program Management*, 2017, 80

136. b. Estimated the likelihood and possible impact of the changes

The purpose of a program change assessment is to provide inputs to the program charter among other items. In a change assessment an estimate of the likelihood of possible impacts of changes that could arise is conducted. By doing so, measures can be taken so the program manager can respond to them positively rather than in a disruptive way.

PMI®, *The Standard for Program Management*, 2017, 107

137. b. You should establish an agreed-upon basis to evaluate risks

Program risk management planning identifies ways to approach and conduct risk management activities. Based on the importance of the program to the organization, it evaluates the needed level, type, and visibility of risk management. While it identifies risk management activities, it also establishes an agreed-upon basis to evaluate risks.

PMI®, *The Standard for Program Management*, 2017, 120

138. c. Prepare a quality assurance change request

Audits take time, and results must be documented. The program management team is responsible for implementing required quality changes. As a result of the audit, a quality assurance change request should be issued to implement the auditor's findings, an output of Program Quality Assurance and Control.

PMI®, *The Standard for Program Management*, 2017, 132

139. c. Approve the program to continue with modifications

Phase-gate reviews serve a number of different purposes. During these reviews, the program steering committee decides whether to continue to the next phase, continue but with modifications, or end the program or a component. The steering committee then approves or disapproves the program's passage from one significant phase to another.

PMI®, *The Standard for Program Management*, 2017, 75

140. a. Brainstorming

A brainstorming session with the core team is useful in identifying potential stakeholders, their roles, and significance to the program. It aims to name stakeholders across the entire program life cycle.

PMI®, *The Standard for Program Management*, 2017, 62

141. d. Having a comprehensive business case

This comprehensive business case includes metrics if benefits realization and contribution and comprehensive status reports are available that show deliverable status and assessment of readiness for transition and component closure reports.

PMI® Project Manager Competency Development Framework, 2017, 117–118

142. d. Comparative advantage analysis

Comparative advantage analysis is useful to consider any competing efforts within or external to the organization and is in the business case. It also may include ‘what-if’ analysis to show whether the program’s objectives and intended benefits could be achieved in other ways.

PMI®, The Standard for Program Management, 2017, 39

143. a. The availability of key staff members

Resource requirements and the program’s resource plan are used in Program Resource Management. As the program manager conducts resource planning, availability is a key consideration in order that critical resources can be optimized for use across components.

PMI®, The Standard for Program Management, 2017, 133

144. b. People can see the overall program’s health

With a defined set of reports the PMO, stakeholders, governance, and sponsors can assess the overall program’s health and take action if needed for benefit delivery.

PMI®, The Standard for Program Management, 2017, 51

145. d. Quality management

Quality management permeates program management. As noted in Program Quality Management Planning, it should be considered when defining all program management activity and for every deliverable and service. It is recommended that a program quality manager participate in planning activities such as resource management to verify that quality activities and controls are applied and flow down to the component subprograms and projects even if they are performed by contractors.

PMI®, The Standard for Program Management, 2017, 118

146. a. Consult stakeholders and involve them from the start

The change approach affects stakeholder engagement. While there are a number of steps to follow to integrate program changes, the sequence in which they are performed is a key element. This means it is essential to consult stakeholders and involve them from the start and see if they can assist in planning for the change and consult with them while implementing the change.

PMI®, *Managing Change in Organizations: A Practice Guide*, 2013, 76–77

147. a. Review historical information

While coal mining now is new in this specific country, your firm has been building coal mines elsewhere. Therefore, it has historical information to use from these other programs to determine the types of resources that were required.

PMI®, *The Standard for Program Management*, 2017, 119

148. a. Component managers coordinate or report deliverable information

Many contracts are centralized at the program level to benefit many components. When this approach is followed, component managers coordinate or report deliverable acceptance, contract changes, or other contract issues to the program team.

PMI®, *The Standard for Program Management*, 2017, 131

149. a. Set up a portfolio organization in the company

If an organization lacks a portfolio function, the process to develop the idea and justify it is done within the organizational governance framework. The organizational governance is a framework, functions, and processes to meet organizational strategic and operational goals; portfolio management then is used to select and oversee whether the organization is selecting the right programs and projects to pursue that will deliver benefits and are aligned with the organization's strategic objectives.

PMI®, *The Standard for Program Management*, 2017, 67, 70

150. c. Determine stakeholder issues that may lead to risks

Stakeholder issues and concerns are likely to affect aspects of the program. Impact analysis techniques should be used to understand the urgency and probability of stakeholder issues and determine which issues may become risks to the program.

PMI®, *The Standard for Program Management*, 2017, 65

151. b. Ethical concerns

In evaluating program objectives ethical concerns are a key consideration. In this example, student privacy is an example of an ethical concern to satisfy.

PMI®. *PMI Code of Ethics and Professional Conduct*. Available from: <http://www.pmi.org>

152. b. Is subject to regulations

The funding may have constraints that limit its use – they include laws, regulations, and other limitations.

PMI®, *The Standard for Program Management*, 2017, 72

153. b. Ensure the new director understands the benefits of this program and how they will be sustained

A benefits sustainment plan is required for programs. In this case, it is essential to then transition the benefits to the new program director.

One approach to help sustain the benefits is to involve the new director in preparing this plan and making sure the director understands the benefit management plan and reports prepared to date.

PMI®, *The Standard for Program Management*, 2017, 53–54

154. c. Program steering committee

The program steering committee approves recommendations for program closure confirming that conditions that warrant closure are satisfied, and recommendations for closure are consistent with the current organizational vision, mission, and strategy.

PMI®, *The Standard for Program Management*, 2017, 78

155. a. Are the champion for change

The program manager must be familiar with organizational change management. He or she is the champion for change and must be the key communicator of program changes, both positive and negative.

PMI®, *The Standard for Program Management*, 2017, 59

156. d. Prepare a roadmap

In addition to serving to outline major program events as the roadmap is a graphical representation of the program's intended direction, it is an effective way to communicate the overarching plan and benefits to stakeholders to build and maintain advocacy.

PMI®, *The Standard for Program Management*, 2017, 37

157. d. Prepare a contract closeout report

Program Procurement Closure involves closing out each contract on the program after ensuring deliverables have been completed satisfactorily, all payments have been made, and there are no contractual issues. A contract closeout report should be prepared.

PMI®, *The Standard for Program Management*, 2017, 140

158. c. May need to play a coordinator role in the process

In this situation, it is a top-down program as it was initiated by the University Chancellor. Therefore, it has clearly stated objectives and a defined structure, enabling the program manager to play a coordinator role as the stakeholders mostly are passive.

PMI®, *Managing Change in Organizations: A Practice Guide*, 2013, 83

159. a. Maintain a record of the proposed change

When there are changes, the program team should maintain a record of the proposed change, its rationale, and outcome.

PMI®, *The Standard for Program Management*, 2017, 74

160. d. Analyze planned versus actual benefits

Benefit reviews can be conducted throughout the program. They show how governance interfaces with benefits management. The reviews will focus on planned versus actual benefits along with value delivery and strategic alignment.

PMI®, *The Standard for Program Management*, 2017, 52

161. b. Historical Information

Historical information is a type of environmental analysis used in strategic program management in program definition. Previously completed programs are a great source of lessons learned for program managers.

PMI®, *The Standard for Program Management*, 2017, 40

162. b. Review the rough-order-of-magnitude estimate

As part of Program Initial Cost Estimation, an assessment of the overall cost of the program and its level of confidence is prepared. It is a rough-order-of-magnitude estimate as it is too early to prepare a detailed estimate as not enough information is known. Still, it is an input as you prepare your charter and is useful if there is any information about the sources of the costs that could not be estimated.

PMI®, *The Standard for Program Management*, 2017, 107

163. b. Mean time between failures

Since the components involve systems, an appropriate quality metric to include as part of the service level agreement is mean time between failures.

PMI®, *The Standard for Program Management*, 2017, 118

164. a. Recognize resource decisions are similar to the economics of supply and demand

Resources are scarce in most organizations. Resource prioritization enables the program manager to prioritize resource use especially those that are scarce and optimize their use across components. Resource needs also will fluctuate making this situation analogous to the economics of supply and demand.

PMI®, *The Standard for Program Management*, 2017, 133

165. c. Record each change request in a change log

Change requests are common on large and complex programs. A program change request serves to modify any program document, deliverable, or baseline and should be recorded in a change log.

PMI®, *The Standard for Program Management*, 2017, 125

166. b. Work with known stakeholders to consider all points of view

The level of interest and involvement of stakeholders varies widely. Some stakeholders may be completely unaware, or if they know about the program, they may not be interested in it. However, the program manager is responsible to spend time and energy with known stakeholders because a goal is to ensure a variety of points of view are considered and addressed during the program.

PMI®, *The Standard for Program Management*, 2017, 59

167. b. Program charter

Among other things, the program charter is the document that formally expresses the organization's vision or 'to-be' state, its mission or why it is important, and the benefits the program is to produce.

PMI®, *The Standard for Program Management*, 2017, 36

168. a. Regularly scheduled reviews

Program steering committees are the most common method used to perform governance oversight activities. The program governance plan includes a schedule of anticipated governance meeting, activities, and key milestones, such as decision-point and phase-gate reviews, program health checks, and audits. It also provides guidelines to schedule other meetings with criteria defined as to when to schedule them.

PMI®, *The Standard for Program Management*, 2017, 71

169. a. You want to recognize the company's organizational change management strategy

By targeting communications to the stakeholders needs, interests, requirements, and wants according to their change readiness, you also need to recognize the organization's change management strategy speed and scale.

PMI®, *The Standard for Program Management*, 2017, 59

170. c. The program be set up with a viable business case that has a list of initial benefits to be achieved

A business case is required for each program, and as part of it, benefits are identified for the program. It connects with the organization's strategy and objectives.

PMI®, *The Standard for Program Management*, 2017, 47

Practice Test 2

1. Recognizing the importance of benefits rather than only deliverables has been and is a major culture change to your agriculture cooperative. You are the program manager to change the culture of this organization such that people at all levels understand the necessity of benefits and the value they will bring to your program. Thus far, you have six components in your program and expect more to be added since the program is a change initiative. You need to determine—
 - a. Ways to communicate and measure progress
 - b. Target dates to achieve each benefit
 - c. Internal and external influences
 - d. Whether the benefits achievement links to finances
2. You are working to establish program management in your organization. You recognize since you are working in the Portfolio Management Office that there are many benefits to be attained if projects that are somehow related can be part of a program structure since through a program, more benefits can be attained than if they were managed separately. You recognize the importance to aligning program goals and benefits with long-term organizational goals. Therefore, you realize as the company embraces program management, you will need to hire people as program managers, or appoint people from within the organization, who have skills in—
 - a. Negotiations
 - b. Integration
 - c. Political awareness
 - d. Strategic visioning

3. Your organization has a defined career path in project and program management and you are now a program manager. Since you have your PMP®, when PMI announced the PgMP® certification, you asked if you could move into a program management position, so you could gain the hours needed to qualify for this credential. This is your first program management job. Your program management plan now has been approved. Your emphasis now should be on—
 - a. Holding a kickoff meeting with your team
 - b. Delivering intended benefits
 - c. Chartering projects and appointing project managers
 - d. Determining needed knowledge, skills, and competencies for potential team members
4. You are working for a pharmaceutical company as the program manager for the development of a breakthrough drug to inhibit the growth of cancer tumors and eliminate the need for chemotherapy or radiation treatments. Your CEO is determined that your company will be the first to get approval from the Food and Drug Administration (FDA) for this new drug. You have performed an in-depth analysis of stakeholders in your company and have identified the following key external stakeholders: consumer groups, oncologists, the FDA, and cancer patients. Your next step is to—
 - a. Finalize the results of your stakeholder identification and analysis by preparing a transition plan
 - b. Note stakeholder considerations in your program charter
 - c. Rank the stakeholders by importance and assign key team members to work with the top two
 - d. Ask your Marketing Department to perform an analysis of the competition
5. You are a newly hired program manager in your company and plan to use a number of contractors and serve as the system integrator on your program. Your Procurement Department suggested that the qualified vendor list be used to simplify the procurement process and pointed out one vendor that had performed well on a similar program in the past. The problem is that this vendor's company is owned by your cousin. You should—
 - a. Use the vendor since the Procurement Director suggested the company based on past performance
 - b. Disclose this relationship to the Procurement Director and to your sponsor immediately
 - c. Suggest that since this vendor's firm is owned by your cousin that it is more appropriate to have a competitive process with a RFP
 - d. Use a competitive process with a RFP and do not include past performance work with your company as an evaluation criterion

6. You are working for a pharmaceutical company as the program manager for the development of a breakthrough drug to inhibit the growth of cancer tumors and eliminate the need for chemotherapy or radiation treatments. Your CEO is determined that your company will be the first to get approval from the Food and Drug Administration for this new drug. So far on your program, with its six projects, you have had a number of change requests, which is not surprising given the complexity of the program. At the program level, analysis of change requests involves identifying, documenting, and estimating the work the change would entail. As program manager, you also need to—
- Determine which components are affected
 - Meet with the program steering committee for approval, rejection, or deferral of any request
 - Convene a meeting of the Configuration Control Board
 - Maintain a change log for status
7. The emphasis at your logistics company has always been to ‘do projects right’. Therefore, your management established a Project Management Office, with the responsibility to develop a methodology that project managers would follow that was consistent across the organization. This has proven to be effective. Now the organization is doing the same for program management. Since it has been successful in ‘doing projects right’ and is ‘doing programs right’, the organization now has implemented portfolio management to ensure it is ‘doing the right programs and projects’. The relationship between portfolio management to program management thus is—
- One comparable to a child-parent
 - Collaborative
 - Focused on achieving planned outcomes
 - One that emphasizes management of issues and risks with an escalation process
8. You are managing a systems integration program for your company, which is under contract to your State government. This program includes a hardware systems project and an information systems project; other projects are expected to be added as the program progresses. Because this program will include numerous projects, you decided to—
- Have each project use a distinct life cycle as defined by the program management office (PMO)
 - Define a common life-cycle model for the various projects
 - Establish a program core team
 - Prepare the project management plans

9. You have been appointed program manager for the closing phase of the systems integration program for a global consulting firm, under contract to your Department of Commerce in your government. You have a large, complex program, and it took four years to complete it. But before you can begin to close the program, you need to review the—
 - a. Program charter
 - b. Business case
 - c. Program management plan
 - d. Benefits management plan
10. You are pleased to finally move into a program management position in your city, and as the program manager for the new wastewater treatment initiative, you have now completed your program management plan. You have selected project managers and also a core team and had defined criteria to help you evaluate the various candidates. You are fortunate that you have worked with two of the people before on specific projects, but the others are new to you, and the team has not worked together previously as a team. As a program manager, you must be an effective leader. A key area of focus is—
 - a. Ensuring task delivery
 - b. Adding value to decision making
 - c. Setting directives and procedures
 - d. Coordinating interdependencies between projects
11. You are managing a program that comprises new systems application development and maintenance activities. These applications are critical to your company, CDE, as they involve access to proprietary data. The systems must be available to your clients on a 24/7/365 basis. Much of the work on your program will be outsourced as you have an aggressive schedule to meet; fortunately CDE has a qualified vendor list to simplify the acquisition process. This program has high visibility in CDE. You and your core team realize the high level of interest and have worked hard to identify the key stakeholders and determine their position toward your program. You have prepared your stakeholder engagement plan, and it has been approved by your sponsor and Governance Board. Now, the next step for you and your team is to—
 - a. Provide guidelines for component-level stakeholder engagement
 - b. Prepare a stakeholder inventory
 - c. Ensure the stakeholder management plan supports CDE's strategic plan
 - d. Communicate to all stakeholders a need for change to the new systems applications

12. On your new program to totally upgrade the 787 so it is state-of-the-art in every way, you have a larger number of stakeholders than did your counterpart program manager on the original 787. You are working actively to identify early all the key stakeholders and prepare and follow your stakeholder engagement plan. To date, you find the stakeholder's major interests are in the program's benefits. However, the program is progressing as planned. In your plans, you have decided to conduct an overall review of the program's benefits with the Governance Board during—
- Execution
 - Benefits Delivery
 - Program Closing
 - Program Delivery
13. As the manager of your company's natural gas distribution program, you are pleased to have this program as it is ranked number one in the company's portfolio. So far, you have five separate projects, and the program is scheduled to last four years. In order to gauge program quality, a powerful metric is—
- End user satisfaction
 - Benefit sustainment
 - Effectiveness of adherence to the program's quality policy
 - Cross-program inter-project quality relationships
14. Now that you have moved into this program management role in your manufacturing company, you realize your work really involves active involvement with stakeholders at a variety of levels. It is also compounded because on your program you have external stakeholders involved and need to spend time communicating with this group. Additionally, your program steering committee is extremely interested in your program and wants to meet more regularly than solely at phase-gate review sessions. They have requested these other meetings in order to—
- Ensure expected benefits are in line with the original business case
 - Focus on alignment of the program and your projects in it with the organization's strategic plan
 - Determine if the level of risk still remains acceptable to your organization
 - Focus on ongoing performance and progress

15. Your goal as a program manager for yourself apart from your program is continuous improvement. You are working to improve your personal competencies as well as your performance competencies. You want to do well on all the programs you manage and also in areas of interpersonal skills. Your overall goal is to become the company's Chief Portfolio Officer. Now, you are working to demonstrate your ability to capture information and consolidate it in your plans and in your scope statement, which means you are focusing on—
 - a. Knowledge transfer
 - b. Program communications management
 - c. Initiating studies of scope, resources, and costs
 - d. Preparing your program charter
16. As you work to propose a program to your Portfolio Review Board to develop a new colon cancer detecting approach that does not involve any pre-preparation work or after effects to patients, you want to also identify high-level financial and non-financial benefits for this program. You also want to make sure the benefits are congruent with the funding goals for the program as the financial organization will not be a passive stakeholder. One business case driver for financial analysis that often is overlooked is—
 - a. Mission statements
 - b. Reducing risks
 - c. Increasing efficiency
 - d. Investment decision
17. As the program manager for the landfill program for your county, you have assembled your program team. It consists of civil engineers, regulatory specialists, project managers, and environmental engineers. This program is considered to be a very large one that will take a number of years to complete to deliver the societal benefits as planned. You plan to add some key subject matter experts as required. You also will have contractors on your team. With the various contractors, you are considering—
 - a. Using your PMO
 - b. Adding a specialist in contract management to the core team
 - c. Using blanket purchase agreements
 - d. Using fixed-price contracts with incentives for early completion

18. Now that you have moved into this program management role in your manufacturing company, you realize your work really involves active involvement with stakeholders at a variety of levels. It is also compounded because on your program you have external stakeholders involved and need to spend time communicating with this group. Additionally, your program steering committee is extremely interested in your program meets often on a variety of topics. While you have five projects in your program, the Manufacturing Director at your company, CCC, requested that you add another project to your program. Doing so will mean you need more people and funds than you originally thought for your program. You therefore need—
- A component management plan
 - Reprioritization initially of the projects in your program
 - Portfolio review board approval
 - Program steering committee approval
19. As the program manager working to upgrade and integrate the back-office components of your organization's systems, you have five projects in your program. You realize all programs, and projects, have risks associated with them, and some of the high-level risks are in your program charter. As you prepare a risk management plan, it is essential to define—
- Risk profiles
 - Market conditions
 - Risk management consolidation
 - How the risks may affect program success
20. You are a program manager and are responsible for a major project to integrate the back office components of your organization's systems. You have five projects in your program. Quality is important to your company. A quality control measurement you plan to use is—
- Number of defects
 - Number of workarounds
 - Customer satisfaction surveys
 - Cost of quality

21. You are the program manager to restructure your department within your government agency. The head of the agency informed your sponsor that she wants to change the scope of the program so you will be working to restructure the entire agency instead of just one department. The Agency Administrator felt this change would be beneficial as the Agency also has to undergo some funding cuts in the next three fiscal years. This represents a major change to your program. You decided before moving forward that your best course of action was to—
 - a. Inform your team and involve them in planning the next steps
 - b. Meet with your program sponsor
 - c. Convene a meeting of your program steering committee
 - d. Meet with the Director of the Enterprise Program Management Office as obviously you now need additional resources for your program
22. As the program manager for the systems integration program for agency ABC, you have projects and program activities in your program. First, your program includes a hardware systems project. Second, you have a systems integration systems project, including new software. Now, you recently added a data warehouse project, and you plan to add an agile project in the fourth quarter. Other projects also are on your roadmap. Program activities include training and maintenance. You have a year and a half to complete the program. Your overall program success is measured in terms of—
 - a. Benefits delivery
 - b. Earned value
 - c. Each project's adherence to its schedule
 - d. Products delivered according to specification
23. The roadmap is an important document used in program management. One key purpose of it is to—
 - a. Use it as part of the program's business case
 - b. Evaluate through it your program's alignment to the strategic plan
 - c. Serve as a basis to transition and integrate new capabilities
 - d. Show internal details of components

24. You met with the organizational leaders for your colon cancer detection program that does not involve any pre-preparation work or after effects to patients, and its business case was approved. You then were asked to take over sponsorship for a program for a long-time customer, which would be awarded to your company under contract, to develop drugs for use by people before undergoing a colon cancer detection program. Your company has never developed these types of drugs before, but your customer is convinced it will not be an issue. You do not wish to disappoint this customer. In this situation—
- You should proceed with the colon cancer detection program as its business case has been approved
 - Tell your customer you cannot take on this opportunity now because you are committed to another program
 - Meet with your organizational leaders
 - Diversify the portfolio and sponsor both programs
25. At the last strategic planning meeting, the CEO set forth a three-year plan with a major goal to be the leading provider of portfolio, program, and project management training in your country; it still will offer general managerial and business analyst training. You are the program manager for this new initiative, and your program management plan has been approved. Resources are limited. To provide guidance to component managers, you decide to—
- Balance program resource needs with availability
 - Set up a resource pool that is managed at the program level for the components
 - Prepare a staffing management plan
 - Set up a process so component managers can escalate any resource issues to you for prioritization
26. You are the program manager to restructure your department within your government agency. The head of the agency informed your sponsor that she wants to change the scope of the program so you will be working to restructure the entire agency instead of just one department. The Agency Administrator felt this change would be beneficial as the Agency also has to undergo some funding cuts in the next three fiscal years. You now have acquired additional resources for this major change and have re-structured your program. You realize, however, that with this change, you should have—
- Followed appropriate procedures and guidelines
 - An appropriate governance structure in place
 - Updated all your plans
 - Communicated with every stakeholder

27. You are managing a landfill program for your county. Your program team consists of civil engineers, regulatory specialists, project managers, and environmental engineers. You also have a number of internal and external stakeholders. Your client, the county executive, has informed you that your program must be completed no later than September 15, 2025, to comply with a regulatory mandate. You have prepared the program's master schedule, and the program dates for each component have been identified, which are—
- Constraints
 - Assumptions
 - Dependencies
 - Schedule risks
28. When you were a project manager, you found the risk register to be an extremely useful tool. Now that you are a program manager, you ask your project managers to use a risk register, and you assign a member of your core program team to identify, analyze, and track program-level risks. You also need to—
- Conduct risk audits
 - Review residual risks
 - Track schedule risks
 - Track scope risks
29. You have been appointed program manager for the closing phase of Program CCC. As the closing program manager, you must ensure that all administrative activities are complete. Sixty-two contracts were awarded during the life of this program. You contact the Contracts Department, and a contracts specialist assists you. You need to—
- Review the contracts management plan
 - Make sure the contractors completed performance reports as stated in their contracts
 - Ensure payments were made
 - Review contract closure procedures

30. Assume you are managing the reward loyalty operational activity for your airline. Members have been complaining about the difficulty of actually using an award, especially your elite members who tend to fly on your airline at least one million miles per year. You feel you will lose elite members to other airlines unless the program changes dramatically, and you believe it needs to offer more possible rewards in conjunction with free stays at leading hotels of the world and also free car rentals. You have received authority from your Portfolio Review Board to establish a new program to emphasize improvements in how rewards are to be handled. You now are in the program formulation process. The key output of it is—
- Identification of the program manager
 - The program charter
 - The benefits analysis plan
 - Feasibility studies
31. You are managing a program to re-design the layout of the company's office space. Some people will have offices, others will work in cubicles, and because of extreme traffic congestion in your city, others can work at home if they wish to do so. If not, they will have their own cubicle at the office. However, having worked previously at a company where a majority of the people worked from home, you know it is easy to then have an 'out of sight – out of mind mentality' and often forget they are available. It is as if they are contractors. In your program, you will be able to contact the remote members of the company almost instantaneously as if you were going into their office and meeting with them formally or informally on various matters. The remote workers told you and your team they liked the idea when you surveyed the entire staff about your program's goals for ideas. Now, you are preparing your master schedule for your program. In doing so, to use the schedule to manage the program it is essential to—
- Assess the impact of component-level changes
 - Incorporate the roadmap
 - Provide guidelines to coordinate schedule baseline changes
 - Focus on schedule risks
32. Assume that you have completed your program to re-design your organization's approach to how it works with other companies. Now that the process is in place and has been followed, it is time to close this program. You must transition the benefits of your program. This is demonstrated—
- According to strategic alignment
 - Through value delivery
 - By implementing required change efforts
 - By providing operational support as requested

33. You are responsible for business development in your division, which is a subsidiary of a large defense contractor. Recently, you attended a conference and learned that many of your competitors are focusing on continuous improvement in sales strategies and techniques and are conducting maturity assessments. When you returned to your office, you prepared a business case and recommended that such a program be initiated. One of the criteria you used was—
- Both intrinsic and extrinsic benefits would be identified so plans could be made to achieve them.
 - The program duration would be short because a maturity assessment typically can be conducted in three months
 - It would be necessary to set up some specific projects from the improvement plan from the maturity assessment, but these projects would be unique to each business unit
 - The benefits that would accrue from the program would be independent of specific deliverables of the various associated projects
34. Your company has established a program to manage the development of new pet food products for dogs and cats, and you have been appointed manager of this program. Your company has determined since most everyone in your county has at least one dog or cat, it must increase its offerings and have a variety of products that dog and cats will want to eat and also are nutritious. Your program has five components, and the new products are to be on the market before the holiday season in December. One component will be designated to quickly obtain needed regulatory approval to facilitate this aggressive schedule. The products are to be packaged in a way that makes them appealing for dog and cat owners to immediately see them in the store and decide to buy them. Therefore, since your program management plan is approved, you are working aggressively to manage the delivery of the program's benefits. A key step in this process is to—
- Reallocate the resources continually among the five components
 - Update the resource plan
 - Update the program roadmap
 - Determine program risks

35. You are the program manager for a program that is using multiple suppliers. Even though you have signed partnering agreements with each supplier, you know performance problems will surface, especially with this program because more than 75 percent of the work is being done by third-party suppliers. Also, your company has not worked with five of these suppliers in the past, and two are start-up companies. You have identified the various stakeholders on this program and classified them. As part of stakeholder analysis, you should document—
- The organizational culture and readiness for change
 - A prioritized list of stakeholders
 - Perceptions of program outcomes
 - Attitudes about the program and its sponsors
36. Because of extreme droughts in your city, water restrictions have been imposed. Your company is awarded a contract to eliminate the need for these restrictions. The program includes a project to formulate and implement policies and procedures that ensure continuity of operations and performance of associated equipment. Another project will oversee improvements and modifications to existing treatment methods and facilities. A third project will design modifications to increase productivity and effectiveness. As the program manager, you will manage, contract, and provide oversight for capital improvement projects. You will need various types of resources and a variety of office supplies. To assist in managing contracts, you should—
- Conduct inspections and audits
 - Use performance/earned value reports
 - Follow your procurement management plan
 - Use written deviations
37. You are the program manager for a program that is using multiple suppliers. Even though you have signed partnering agreements with each supplier, you know performance problems will surface, especially with this program because more than 75 percent of the work is being done by third-party suppliers. Also, your company has not worked with five of these suppliers in the past, and two are start-up companies. Many in your organization are interested in this program and especially how the integration efforts will be accomplished given the large number of suppliers involved. It is important in this situation to ensure—
- A contact change control system is in place
 - A contract administrator is a member of your core team
 - There is compliance with organizational quality policies
 - Key stakeholders have active involvement in the program at all times

38. No one wants to estimate since it tends to be impossible to ensure the estimate is totally correct and will not require revision. Recognizing this dilemma as the program manager to move your aviation company into a completely new line of new business products in the use of dirigibles as a means of passenger transportation, your program definitely is complex. People remember hearing stories when dirigibles crashed, and many fear its safety cannot be trusted. When you prepare your cost estimate you had a subject matter expert, who is certified in this area, to help you. You wanted to have a range of confidence in your estimate once you had one you thought was as complete as possible, so you decide to—
- Use a probability weight based on risk and impact
 - Use a probability weight based on complexity and impact
 - Use Monte Carlo simulation
 - Use sensitivity analysis
39. Your company has a career ladder for those in the project field, which ranges from a project coordinator to the Chief Portfolio Officer. This career ladder was one of the reasons you decided to join the company after you got your PMP. While you began as a junior project manager, you quickly rose to a senior project manager. Today you learned that you had been selected to be a core team member for a major transformation program your organization is launching. This means you—
- Will manage one of the major component in this program
 - Will interact frequently with the program steering committee
 - Will be in the PMO
 - Will help establish the PMIS
40. As the manager of a major program in your company, you have access to various supporting resources. Your organization uses a balanced matrix organizational structure, and supporting resources come from a variety of functional departments. One member of your program team regularly prepares resource deviation reports. These reports are—
- Part of Resource Interdependency Management
 - Described in the resource plan
 - Helpful to determine if the program's benefits will be met
 - Used as part of Risk Monitoring and Control

41. Assume you have determined the risk appetite of your organization, and it is medium if analysis is thorough and reviewed regularly. You also have established a risk threshold for your program for each program objective. Now, you want to ensure the risk thresholds are observed, so you need to:
- Prepare your initial risk analysis
 - Proceed to develop your response strategy
 - Work with stakeholders to drive consistency
 - Engage program governance and the program management team
42. Your company prides itself to be a leader in automobiles. It was the first to market with the Sports Utility Vehicle and an electric car, and it is determined to be the first to manufacture a driverless car that would have the ability to safely fly if there are extreme traffic conditions. This car is to be the most up to date in terms of technology and one people will covet. You are pleased to be its program manager and were part of development of its business case. You have an aggressive schedule to complete the program in three years including obtaining all needed regulatory approvals. You have 11 components in your program. You are considering alternative approaches to initiate should you have any delays in meeting your schedule or in meeting benefit milestones. Doing so means—
- You have prepared your roadmap, so you meet milestones
 - You plan to have your team take a course in crashing should schedule delays occur
 - You are following your business case
 - You are using the results of your schedule assessment
43. You are a program manager in a global software company that uses virtual teams. Work is passed 24/7 from team members on one continent to those on another continent. Since this is a complex program with a significant amount of associated uncertainty, changes in program direction may be needed. Recognizing this can occur on your program, you should—
- Use adaptive change
 - Provide consistent messages about changes to stakeholders
 - Set up an approach to facilitate timely decision making about needed changes
 - Follow your communications management plan

44. While the benefits register has numerous items that comprise it, one that is typically included is to map the planned benefits to the program components as—
- It ensures it connects the components to the organization's strategies
 - Stakeholders feel connected to the benefits and become more engaged
 - It is reflected in the roadmap
 - Acceptance criteria for the components is enhanced
45. You and your core team realize the high level of interest in your program and have worked hard to identify the key stakeholders and determine their position toward your program. You decided to prepare a stakeholder map to put stakeholders into certain categories. One of the advantages of the mapping approach is that—
- Can be done easily through brainstorming sessions
 - Shows the stakeholder's attitude toward the program
 - If done correctly, can promote stakeholder engagement
 - Visually shows stakeholders' current and desired support and influence
46. Before preparing your stakeholder engagement plan, you decided to conduct stakeholder analysis. Your first step is to—
- Brainstorm the possible stakeholders to get a complete list of them
 - Evaluate the degree of support or opposition each stakeholder has regarding the program
 - Gain an understanding of expectations of program benefit delivery
 - Obtain information from stakeholders to better understand the culture, politics, and concerns about the program
47. Your company is noted for its maturity and excellence in program management. It has received awards for program and project delivery. People seem dedicated to the success of the company and in its management of programs and their projects, which is due to—
- Awareness of the influence of environmental enterprise factors
 - Producing the intended results of components according to the program management plan
 - A portal for sharing information
 - An up-to-date program management information system

48. You are the program manager for a global Fortune 100 software company. The company has determined that it must pursue Software as a Service, and it wants to use agile methods as it enters this market to speed the time to complete the Software as a Service program and to develop a marketing campaign for it. You also know you will need to do extensive testing before the program is complete. One tool you should develop to help execute the program is a—
- Work authorization system
 - Issue and risk escalation process
 - Roadmap
 - Decision log
49. You are the program manager for a global Fortune 100 software company. It has determined that it must pursue Cloud Computing, and it wants to use agile methods as it enters this market to speed the time to complete the Cloud Computing program and to develop a marketing campaign for it. You are responsible for ongoing management of program benefits. You must ensure that the program transition activities provide for continued management of benefits through the framework of—
- Operational areas
 - Transfer of the benefits to the customer
 - Program closure
 - Consolidation of the benefits
50. You are the legacy system conversion program manager in your company. You need to upgrade the company's business development/sales tracking system, which was developed in C++ to Software as a Service. You now have projects in your program to also upgrade the accounting/financial management system, interface them to the program management information system, and add a knowledge management system. You have a complex program. You now are analyzing the stakeholder register and map to prepare the stakeholder engagement plan and are considering—
- Ongoing program activities
 - The program charter
 - Evolving stakeholder needs
 - Potential partnerships among stakeholders

51. You are the program manager for a program that is using multiple suppliers. Even though you have signed partnering agreements with each supplier, you know performance problems will surface, especially with this program because more than 75 percent of the work is being done by third-party suppliers. Also, your company has not worked with five of these suppliers in the past, and two are start-up companies. Today, one of the suppliers responsible for Project D informed you that it did not have sufficient financial capacity and resources to continue on the program and was going to declare Chapter 11 and file then for bankruptcy. Obviously, this change involves other projects on your program and the entire program's ability to deliver its benefits on time. You have decided that the best course of action is to first—
- Call an immediate meeting with your program team
 - Contact the Procurement Department to obtain their services in obtaining another qualified supplier
 - Contact the suppliers with whom you have had positive working relationships in the past to see if they can take on this company's work
 - Follow the issue escalation process
52. As the manager for a water-gasification program that will provide potable sparkling mineral water from public water fountains in your city, you have leased some of the needed equipment. Unfortunately, you have found that on two of your projects, some of these leased resources did not meet specifications. The project managers on Projects A and D advised you of their concerns because they were concerned that overall program progress might be affected. You need to identify a course of action to best achieve program benefits, which means you need to—
- Perform an issues analysis
 - Monitor contract expenditures
 - Conduct a risk audit
 - Manage program level issues
53. Assume you are the program manager for your dairy cooperative and are responsible for launching a new line of cheese products that is not now available in your country. While the CEO was the person behind initiating this program, resources are scarce, and others wonder why it is needed given the dairy cooperative is profitable. You decided to hold a focus group of stakeholders to identify the benefits the new program line will bring to the company. The formal declaration of the benefits you will build on in the focus group is—
- The organization's strategic plan
 - The business case
 - The program charter
 - The decision by the Program Steering Committee

54. You have successfully finished your new line of SMART cars, and they have been well received. In all, you have four different models, all using ethanol and all with advanced safety measures. They also are environmentally efficient. They are safe to drive on interstate highways at high speeds, and everyone enjoys looking at them. Now that the cars are being purchased, to derive the optimal value from the work you and your team accomplished, as the program manager, you should—
- Conduct team satisfaction surveys
 - Plan the transition from program management to operations
 - Ask an independent party to contact end users to ensure the effectiveness of customer relationship management
 - Provide support to end users throughout the product life cycle
55. As the key member of your company's Program Selection Committee, you are responsible for deciding which programs to undertake. Your Committee meets on a quarterly basis and then selects new programs and projects as appropriate and rebalances the company's portfolio accordingly. As you consider the proposed business case for a new program and assess the suggestions of the other committee members, a key factor is—
- Constituent component identification and definition
 - Human resource requirements
 - Overall stakeholder interest
 - The project's feasibility study
56. Program governance supports a program in many ways. Assume your country is running out on the needed supply of saline products used in the medical field. You have been designated as the program manager by your area of your country to determine what to do. You have four components thus far, your program is considered a complex one, and it is uncertain if you and your team can solve the problem. One of your components is responsible to see if there are alternative products that could be used but has not had success. Some key stakeholders do not see any progress in benefit delivery. In such a situation, program governance can help by holding a discussion forum to—
- Better engage stakeholders
 - Escalate issues and risks
 - Facilitate the adaptive realignment of the program's approach
 - Design and authorize an assurance process with reviews and health checks

57. You are the program manager to restructure your department within your business unit. The head of the company informed your sponsor that she wants to change the scope of the program so you will be working to restructure the entire company instead of just one department. You prepared a stakeholder register as part of your planning efforts for the restructured program and then worked to—
- Assess the stakeholders' ability to influence strategic goals
 - Determine metrics to evaluate stakeholder participation in the program
 - Prioritize a list of stakeholders
 - Outline how stakeholders will be engaged in the program
58. You are managing a program in your company, and you are following the phases articulated in the Project Management Institute's *The Standard for Program Management*. Assume you have prepared your benefit management plan, and it was approved. Now, you must concentrate on—
- Linking component activities to planned outcomes
 - Delivering benefits
 - Mapping the benefits to the program components
 - Establishing a program architecture
59. You are the program manager for a program that is using multiple suppliers. Even though you have signed partnering agreements with each supplier, you know performance problems will surface, especially with this program because more than 75 percent of the work is being done by third-party suppliers. Also, your company has not worked with five of these suppliers in the past, and two are start-up companies. Many in your organization are interested in this program and especially how the integration efforts will be accomplished given the large number of suppliers involved. Recently, your organization made a major change in its financial management policies and now is requiring a 10% retainage as part of each supplier's contract. This means that—
- You require a person specializing in contracts and procurement management to be a member of your core team
 - Suppliers are now a major stakeholder
 - You need to actively work to rewrite each contract and then submit it to your Contracts Department
 - A supplier engagement plan should be prepared

60. The PMIS is helpful during the program life cycle. While it can be managed by a PMO, it also can be developed and managed by those on the core team who report to the program manager. Often overlooked as part of the PMIS is—
- Knowledge transfer tools
 - Issue data and analysis tools
 - Resource tools
 - Productivity tools
61. You are managing a program to produce the next generation of hurricane-, tornado-, and typhoon-resistant glass. Technical specialists in your company will support each of the projects in this program. Four projects are in process. Project A is fully staffed; Project B has about 75 percent of the staff members it needs; and Projects C and D are about to begin, but these two projects will require the services of several key specialists now working on Projects A and B. You tell Project Manager A that he must release two staff members to support Project C and three to support Project D. As you make these decisions, you—
- Use human resource planning
 - Meet next with the five people involved and tell them they must move to the new projects
 - Update the records
 - Follow the resource management plan
62. You are managing a program to produce the next generation of hurricane-, tornado-, and typhoon-resistant glass. Four projects are in process. Project A is fully staffed; Project B has about 75 percent of the staff members it needs; and Projects C and D are about to begin. Your program team and component managers identify several issues that force you to modify program requirements. Some changes are minor, but one issue requires a program scope change. Your next step is to—
- Involve the program's steering committee in its resolution
 - Prepare a change request
 - Update the program management plan
 - Update the scope statement
63. You have identified your stakeholders on your program to address climate change in your county. You realize that some stakeholders have more influence and interest on the program than others. But you also know—
- They are the ones you need to work with closely
 - You should meet with them and understand any concerns they may have
 - You need to understand and address the changing environment on your program
 - You need to focus on those stakeholders who have the most power

64. You have 350 stakeholders on your program. To gauge their level of interest and influence on your program and to better understand their expectations, you sent each one a questionnaire with a place for comments. After analyzing the results, you identified your top five stakeholders as: your sponsor, members of the Governance Board, the Chief Financial Officer, your customer, and the Director of Operations. However, you realize—
- You have to balance their interests
 - You should monitor them to see if anyone changes
 - You and your team should not disclose the questionnaire results as some are negative
 - You should expand your list of the top five for greater positive proponents
65. Assume you have just been named program manager to develop and manufacture a new drug designed to have fewer side effects than the existing ones on the marketplace to strengthen bones and help to minimize bone cancer. A number of benefits therefore will be associated with this program. You want to establish your program in order to—
- Provide a process to determine the extent each benefit is achieved before the program closes
 - Describe how each benefit will be measured
 - Establish a performance baseline for the program
 - Monitor interdependencies by program components and how the outcomes deliver benefits
66. Your company is a leader in the pharmaceutical industry. It has received approval from the Food and Drug Administration for a new drug that will cure all glaucoma conditions. You are managing a process to upgrade the manufacturing process, and your CEO has given you an aggressive schedule, especially so the glaucoma drug can reach its numerous possible patients. You have five projects in this program, and you are getting ready for your second decision-point review on it. Although it is cumbersome assembling all the required materials for these reviews, you know they are useful as they assess—
- Actual versus planned realization of benefits
 - Lessons learned are collected to prevent any future problems and improve overall processes
 - Alternatives to be uncovered when problems are identified
 - Processes and procedures being used as designed

67. You are the program manager to restructure your department within your government agency. The head of the agency informed your sponsor that she wants to change the scope of the program so you will be working to restructure the entire agency instead of just one department. The entire agency basically is a stakeholder as everyone is concerned about the impact of the reorganization and the funding cuts that have been proposed. As the program manager, you need to—
- Use expert judgment
 - Bridge the gap between the current state and the desired future state
 - Demonstrate how the reorganization supports strategic goals
 - Hold meetings with affected groups to listen to their concerns and obtain their buy in to the program
68. As a program manager for a leading defense contractor, you must determine which components should be part of your program. Your program involves the development of the next generation parachute. It is to be completely safe, easy to deploy, and available in one year at a reasonable price. You have identified eight components to be in your program. Your executives want it to be completed at the time of the next Paris Air Show. When you do this, you are working in the—
- Benefits planning
 - Pre-Program Preparations
 - Program Formulation
 - Component identification
69. It is easy to focus primarily on the benefits programs will deliver to the organization, and the deliverables the projects in each program will produce. Many organizations, though, do not have a clear understanding of all the programs and projects that are under way, and many people do not want to disclose some ‘pet’ programs they are working on as they believe they are breakthrough initiatives for the company. However, assume you are in an organization that lacks such a list of all the work in progress, and your company needs such a list as the executives have mandated that a portfolio management process be followed. The executives plan to meet monthly to review the existing portfolio and determine whether new programs should be added, and others deferred or terminated. The overall objective is to ensure the—
- Programs in the portfolio are focused on alignment to strategic objectives
 - The portfolio’s strategy is one in which it focuses on preventing poor return on investments in the programs that are pursued
 - Program inputs are emphasized along with direct program deliverables and metrics
 - The emphasis continues with the triple constraint as programs to pursue are considered

70. Assume you are working toward your doctoral degree in program management part-time as you work in your City government office that oversees all existing regulations and standards. You have suggested based on your studies that many of the existing projects to overhaul and review these regulations and standards might be better handled as a program since through a program the benefits from proposed projects can be coordinated more effectively especially if the benefits are interdependent. However, your government wants to know how you plan to measure the benefits in this program. You explain KPIs to measure benefits will be stated in the—
- Program management plan
 - Benefits management plan
 - Benefits realization plan
 - Project management plan
71. Assume your suggestion to your City government to combine projects into programs in the regulations and standards area has been well received. After a meeting of the City's Commissioners, they appointed you as the program manager to oversee this work. You have decided as one of your first tasks to prepare a benefits register and will base it on the expected benefits as defined in the—
- Program charter
 - Organization's strategic plan
 - Program management plan
 - Portfolio strategic plan
72. You are the program manager for a new product development program for Company AAA. This product will serve to make sure that consumers will be able to wash all types of clothing through use of your product, and therefore, they no longer will need to spend money at dry cleaning establishments. To complete your program successfully, you have identified five components. You also will require some specialized resources that are always in demand in your organization; therefore, you met with members of your core team and subject matter experts to—
- Assign roles and responsibilities
 - Determine reporting relationships
 - Prepare a staffing management plan
 - Prepare a program resource plan

73. You are the program manager for a new product development program for Company AAA. This product will serve to make sure that consumers will be able to wash all types of clothing through use of your product, and therefore, they no longer will need to spend money at dry cleaning establishments. To complete your program successfully, you have identified five components. You want to assess the likelihood of achieving these planned outcomes so you decide to—
- Use trend analysis
 - Prepare a forecast
 - Conduct a benefit audit
 - Conduct a risk review
74. Assume you are the program manager for a major food company in your country. The systems it uses are totally outdated, and you know from your previous experience working in finance that the company really needs an Enterprise Resource Management system. However, you could not find anyone who would sponsor it. When you went to the International Food Safety Conference, you talked with two vendors specializing in Food Management Systems. After research and some benchmarking, you learned competitors were using them. You prepared a business case, and the Chief Operating Officer agreed to be your sponsor. Your business case, program charter, and program management plan have been approved, and you are working now to deliver the program benefits and complete it within a year. After careful planning you learned a risk you identified about employee resistance to this system occurred, and many people are looking or work elsewhere. In this situation, it is useful to—
- Hold a meeting with affected employees and gain their confidence about the new system
 - Ensure each affected person will have a position in the company by working with human resources
 - Recognize that it is natural to resist change and hold one-on-one meetings with those affected to discuss its benefits
 - Use the contingency plan you prepared in case this risk occurred

75. As the program manager in your company responsible for establishing a culture of portfolio management, you were fortunate to be assigned early so you could participate in the development of the program's charter. Your program management plan and the other key subsidiary plans have been approved. As you are working to provide oversight on the program and its four components, you realize a new component is needed to integrate the efforts of the existing components. This is needed because—
- There are resource prioritization issues that are causing existing components to miss scheduled milestones
 - You are using earned value and now are at 15% into your program and forecasts show your schedule and budget targets will not be met
 - You must continually escalate issues and risks to the Governance Board for resolution
 - The components are producing deliverables as planned, but their benefits are not being realized successfully
76. Working with a small core team, you completed your program management plan and the other key subsidiary plans and also prepared a master schedule. As your company follows the PMI® program management standard for guidance, you know lessons learned are useful but should be organized effectively in order that they—
- Assist in preparing the final program report and in overall program transition
 - Serve as a useful reference for other program and project managers
 - Provide data for use in quickly responding to stakeholder requests for additional program information
 - Serve as a reference to refer to past decisions and prepare trend analysis
77. You are the program manager for a program that is using multiple suppliers. Even though you have signed partnering agreements with each supplier, you know performance problems will surface, especially with this program because more than 75 percent of the work is being done by third-party suppliers. You also have a large number of internal stakeholders who are actively involved or interested in your program. To help your stakeholders have a common understanding of the high-level expectations for the program, you should provide stakeholders with information contained in the—
- Stakeholder engagement strategy
 - Business case
 - Benefits transition plan
 - Program management plan

78. You are sponsoring a new program to be implemented at the beginning of the corporation's fiscal year. This program is to design the next generation refrigerator that also can serve as a dishwasher and a stove with an oven so there is only one large appliance in one's home. It will use state-of-the-art technology but will be offered at an affordable price. The new appliance is to be designed to be attractive and not to require much space. As the validity of the business case was assessed to also help develop the charter, you prepared—
- An analysis of the expected benefits from the program
 - A feasibility study
 - An analysis of competing efforts under way in the corporation
 - A SWOT analysis
79. You are the contract program manager to restructure a department in a government agency. The head of the agency informed your sponsor that she wants to change the scope of the program so you will be working to restructure the entire agency instead of just one department. The Agency Administrator felt this change would be beneficial as the Agency also has to undergo some funding cuts in the next three fiscal years. Since most everyone is involved to some extent, there is extreme resistance to change, and many key stakeholders have been going directly to the Administrator and not to you since your firm has never worked with this Agency before as to why their department should not be part of the reorganization. You and your team are striving to gain the support of all stakeholders, both positive and negative. You decide to—
- Actively use your stakeholder register
 - Conduct a questionnaire to get everyone in the Agency involved in the process
 - Conduct interviews with the heads of each of the departments and support offices
 - Re-evaluate your stakeholder engagement plan

80. Your company is a leader in the pharmaceutical industry. It has received approval from the Food and Drug Administration for a new drug that will cure all glaucoma conditions. You are managing a process to upgrade the manufacturing process, and your CEO has given you an aggressive schedule, especially so the glaucoma drug can reach its numerous possible patients. You have five projects in this program, and you are getting ready for your second gate review on it. Your program steering committee is one that is extremely proactive, and it also holds a number of periodic health checks on your program in between these gate reviews. This is because—
- They want further involvement than just a possible four meetings during the life cycle
 - They want to determine if the level of risk associated with this program remains acceptable especially given the lengthy regulatory process
 - They want to assess performance against the strategic direction of the organization
 - They want to assess performance against benefit realization and sustainment
81. Your stakeholder engagement plan now is complete. As you prepared this plan, you recognized that some stakeholders' interests needed special consideration. However, with this plan you now have—
- An in-depth understanding of the organization's environment
 - A detailed strategy for effective stakeholder engagement
 - A method to communicate program benefits to affected stakeholders
 - A way to balance the impact of negative or resistant stakeholders with those who view the program positively
82. You are the program manager to set up one integrated system in your company that provides a single point of entry that is easy to use rather than the numerous legacy systems that now exist. You have people who are actively interested and strong supporters of this program, and others are resistors as no one really likes change. You have prepared a stakeholder register. This register—
- Shows information distribution methods
 - May require access restrictions
 - Becomes the basic document used to prepare the communications plan
 - Sets forth a stakeholder engagement strategy

83. You are responsible for a major systems integration program that involves converting customer relationship management software, supplier management software, human resources software, and telecom systems from legacy systems to an integrated platform. Your program management plan has been approved. Because of poor performance on two of the projects and by associated vendors, you needed to implement a number of preventive actions and workarounds. You have had to implement a number of change requests. A best practice to follow is to—
- Use change management proactively
 - Consult the program steering committee for assistance because the performance of these projects may be such they feel the program should be terminated
 - Establish an integrated change control process
 - Set up Change Control Boards for each project and at the program level
84. You are responsible for a major systems integration program that involves converting customer relationship management software, supplier management software, human resources software, and telecom systems from legacy systems to an integrated platform. You prepared a program risk response plan. Because of poor performance on two of the projects and by associated vendors, you needed to implement a number of preventive actions and workarounds. However, this program is long and complex, and changes are inevitable. You have described the scope, limitations, expectations, and business impact of the program along with a description of each component and its resources, but now you need to—
- Set up a scope change control system
 - Update the scope statement
 - Focus on preparing and following a change management plan
 - Establish metrics to track adherence to the scope management plan

85. You are the program manager for a new accounting system that will affect more than 500 accounting professionals in 10 locations. You have a core team of five people, and your preliminary schedule shows that in month 13, the transition of your system to the users will begin. This aggressive schedule recently was made even more difficult as every program in your company will have a five percent budget cut; this means it will be even harder for you to get the key subject matter experts you need when you need them. You have a program steering committee for your program. It is important before you submit a recommendation to formally close the program to the committee that you—
- Ensure the members of the operations group are actively involved in the program from the start
 - Provide extensive job aids to the people who will be responsible for running the program once it is completed
 - Document your final lessons learned after you submit a performance report
 - Ensure conditions for closure are consistent with the vision, mission, and strategy
86. You have numerous stakeholders, both internal and external as your program involves members of the public. You also are using five different vendors. Different stakeholders have different areas of interest at different times and may be positive toward the program or negative. You have decided you should—
- Use an issue log
 - Work with a mentor to update your own negotiation and influencing skills as you work with negative stakeholders on this program
 - Conduct another stakeholder analysis to make sure you have a greater understanding of the culture of the organization
 - Set up specific channels of communications
87. You have been appointed as manager for a new program in your organization. This program will receive \$250,000 as an initial investment; \$175,000 at the beginning of year 2; \$150,000 at the beginning of year 3; and \$125,000 at the beginning of year 4. The program will start with a core team of seven senior managers; three project managers will be added during year 2, and two more project managers during year 3. While you work on this program, it is essential to ensure you can—
- Identify and recognize the value the program is to deliver
 - Set up a PMO for overall support, especially in administrative requirements
 - Focus in your planning first on a bottom-up approach and then integrate it with a top-down approach
 - First address the program's vision and justification

88. Wanting to make sure that existing lessons learned from every project and program undertaken in your organization are actually captured and used, you have received approval from your Portfolio Selection Committee to establish a program in knowledge transfer for your services company. The purpose is not only to record these lessons learned in an easily accessible fashion but to also make sure they are used by future program and project managers. You have identified four projects so far that will be part of this program. You recognize for this program to have visibility among the executives of your company that the vision and strategic alignment of the program must be aligned with the organization's strategic objectives. This is done as part of the—
- Pre-Program Preparations
 - Program Formulation
 - Program Strategy Alignment
 - Benefits Identification
89. You are the program manager for a new accounting system that will affect more than 500 accounting professionals in 10 locations. You have a core team of five people, and your preliminary schedule shows that in month 13, the transition of your system to the users will begin. You have a program steering committee for your program. Members of your steering committee were first identified—
- In the program governance plan
 - When the business case was developed
 - As part of the program management plan
 - At the end of the program formulation
90. Rarely have hurricanes reached the northern states of the United States until the past two years. People were not equipped to deal with them. You are the program manager to help ensure people are prepared. Your company won a government contract and developed a business case for the program that was approved quickly. You have a Governance Board set up, but in the last three meetings, the Chief Information Officer or a substitute from IT did not attend. You have defined metrics to monitor performance of stakeholders in your program in the—
- Communications plan
 - Stakeholder engagement strategy
 - Stakeholder engagement plan
 - Stakeholder register

91. As you plan your program, so far you have identified three components, and you are to complete it in six months. It is especially important to identify the program's resource requirements and prepare a resource plan. A useful tool and technique to use is—
- Capacity planning
 - Resource assignment matrix
 - Resource breakdown structure
 - Historical information
92. Working on an internal program to restructure your company so it is more customer facing is a major challenge. No one ever likes reorganizations, and many people fear they will lose their jobs as a result of your program. However, it has relied on its existing customer base for its 20 year life, and a new focus is part of the company's strategic plan to attract new customers and enter new markets. Your program management plan has been approved, and you have three projects under way as you are to complete the reorganization in six months. You are determined to control expenditures to stay within your budget. Therefore, you are focusing on the need to—
- Identify opportunities to return funds back to the company
 - Completing the program ahead of schedule
 - Avoid use of contingency and management reserves
 - Monitor costs reallocation impact and results between components
93. Your company is a leader in the pharmaceutical industry. It has received approval from the Food and Drug Administration for a new drug that will cure all glaucoma conditions. Although demand for the product is high, your company has many other drugs to manufacture. You are managing a process to upgrade the manufacturing process, and your CEO has given you an aggressive schedule. Many people who have responsibility for other drugs in your company are concerned that once your manufacturing upgrade program is complete, the production of the glaucoma drug will be given preferential treatment, and their products will not be produced in sufficient quantities. You and your team realize you have a large number of stakeholders, and many of them are negative toward your program. This means you need to foster use of—
- Change management skills
 - Management skills
 - Strategic visioning skills
 - Political skills

94. Program level stakeholder engagement is different from stakeholder analysis since stakeholder analysis builds on stakeholder identification and focuses on their influence, and expectations. The goal of stakeholder engagement is to—
- Focus on customers
 - Collect hard data on stakeholders
 - Manage pre-set processes
 - Influence stakeholder behavior
95. Working on your glaucoma program, you have received approval from the Food and Drug Administration for a new drug that will cure all glaucoma conditions. Although demand for the product is high, your company has many other drugs to manufacture. You are managing a process to upgrade the manufacturing process, and your CEO has given you an aggressive schedule. Many people who have responsibility for other drugs in your company are concerned that once your manufacturing upgrade program is complete, the production of the glaucoma drug will be given preferential treatment, and their products will not be produced in sufficient quantities. You and your team realize you have a large number of stakeholders; many seem to be negative toward your program. Given this situation, your best course of action should be to—
- Focus on customer expectations
 - Proceed according to your program management plan
 - Recognize the dynamics of managing stakeholder expectations
 - Escalate this issue to your Governance Board to seek assistance in dealing with these stakeholders
96. You have three projects that comprise your program. Your aggressive schedule recently was made even more difficult as every program in your company will have a five percent budget cut; this means it will be even harder for you to get the key subject matter experts (SME) you need when you need them. You have a program steering committee for your program. Today, you had your regularly scheduled status meeting with Project Manager A. He told you he needed a key SME earlier than anticipated because of a new technological risk that had occurred. You were able to negotiate for this SME by meeting later with Project Manager C and getting the SME reassigned for two months to Project A. This was handled appropriately by Project Manager A as he—
- Immediately reported the problem to you
 - Followed the issue escalation process
 - Realized that the SME was on Project Manager C's team and notified you accordingly
 - Asked Human Resources where he might locate a SME before contacting you

97. You were appointed program manager early in your program's life cycle, and you are leading the development of the benefits management plan, which is important in that you are—
- Establishing the benefits baseline
 - Establishing processes to measure progress against the benefits plan
 - Creating tracking and communications processes
 - Defining the program's critical success factors
98. You are meeting with your company's Program Selection Committee. Because your company has limited resources, you are selecting one of two programs to undertake. The return on investment (ROI) and payback periods for the programs are basically identical, so the major factor in making your decision is—
- The balance between cost and benefit
 - The ability to realize benefits before the program is complete
 - Whether the business benefits are easily quantifiable
 - Extrinsic versus intrinsic benefits
99. As you work as the program manager to establish Centers of Excellence in your global company on every continent except Antarctica, you have a large number of stakeholders who are interested in your program. You also have 12 different components and know others will be added as the program continues. Your team, therefore, is a large virtual one, and you hold conference calls regularly, rotating the times in which they are held so no one is always inconvenienced. You also do a lot of traveling to the various sites. You realize you must be excellent in—
- Communicating
 - Understanding cultural differences
 - Distributing consistent messages
 - Actively engaging stakeholders

100. While you have managed programs for years in the aviation field, assume you changed jobs to manage a major transformation program in a leading railroad in your company. You are well-versed in program management, but now you feel you are in a different culture in the railroad, and you do not speak the same language. In aviation you always had a program steering committee on your large and complex programs. When you mentioned establishing one for your railroad program, people questioned its value and usefulness of executives' time to be members. You decided to prepare a governance plan. One purpose of it is to—
- Describe how to realize the program's mission
 - Describe systems and methods to monitor, support, and manage the program
 - Ensure the program's vision and goals accurately reflect those of the organization
 - Demonstrate how you resolved issues and risks
101. Benefits are critical since they are why a program structure is established rather than a series of standalone projects since greater synergies can result. The benefits from these projects though need to be related to be part of the program. Then, in a program charter the program manager would include—
- A list of all the program's components
 - An overview of the benefits management plan
 - The benefit strategy
 - The benefit realization metrics
102. Your state initiated a high-speed, luxury train between two of its major cities, and you were the program manager for it. You will continue in this role as the train expands to a larger city. But you have to complete the documentation for this new program from the beginning. The business case has been approved. The problem with cities A and B is the track crossings were very slow, and five people were killed as they either did not see them or thought it was a freight train that uses the same tracks and could outrun it easily. It moves slowly. You know this problem must be corrected, and representatives of the government's transportation safety board are continuing to evaluate the problem. Expanding now to city C means the train should expand ridership by an estimated three times that of cities A and B. As you prepare your charter, you are following a company template and adding high-level risks. It will be helpful to—
- Review the results of the program quality assessment
 - Brainstorm the risks with your sponsor
 - See if your PMO has a risk management specialist who can join your core team
 - Determine the company's risk approach

103. Assume you are beginning to prepare your stakeholder engagement plan as you know you have a number of stakeholders on your program to make your company one that is more customer centric. You know your customers have high expectations for your products and services, and you cannot expect existing customers to continue to work with you as in the past. They will want to ask questions and provide feedback, and in your program you want to suggest solutions to them and invite them to be on steering committees and participate as new products are developed. Such a program is a radical change from the former way of working. As you prepare your plan, you should—
- Brainstorm with your team to ensure you have identified the stakeholders who are interested in your program
 - Perform a program communications assessment
 - Survey your company's leaders to learn about their expectations
 - Determine how you will prioritize your stakeholders
104. Program governance covers systems and methods by which program and its strategy are defined, authorized, and monitored. It conducts periodic reviews of the program in delivering its benefits enabling the organization to assess the viability of the program and the organization's strategic plan and the level of support needed to achieve program goals. The structure for your program steering committee and its meeting schedules are part of the—
- Overall governance framework
 - Gate review requirements established by the Enterprise Program Management Office
 - Governance plan
 - Program management plans
105. Assume you are working for a dry foods company. For the past five years, every one of your projects in this company has met its goals in terms of being on schedule, within budget, and meeting its specifications. However, your company finds that even though its projects are meeting its goals, overall the company is not meeting its strategic goals and objectives. You were asked to meet with the executive team to discuss your opinions as to what is occurring in the company as you are an experienced and successful program manager. You pointed out that you felt the basic problem was:
- The projects should be managed as a program
 - The programs were not providing needed benefits
 - The organization's strategic goals would change, but the program managers were not aware of the changes
 - The organization requires a Program Management Office

106. You are managing a complex training program in your company. It has a number of components, which include program activities especially in logistical areas. Your team consists of instructional system design specialists who support the program on a full-time basis. For each training project, you need the services of subject-matter experts (SMEs) to complement the instructional designers. Assume that you met today with the manager of Functional Unit C in your company, and she agreed to release two chemists to support Project D in your program. You now need to—
- Meet with Project Manager D and inform him that you have acquired the needed SMEs
 - Transition the SMEs to the program position
 - Determine how this assignment can benefit the SMEs in their career path
 - Update the program resource plan
107. You have a complex program. Thus far, you have passed gate 3 and are executing your program. Because the executing phase in the life cycle will last over a year, your program steering committee is holding periodic health checks with you and your team on a bi-monthly basis. The program steering committee has assumed responsibility for compliance with organizational reporting and control functions. An example is—
- Benefit transition
 - Strategic and operational assumptions
 - Quality criteria and standards
 - Code of conduct compliance
108. In managing a program, you terminated three contracts that supported your projects. One of the contractors went bankrupt, and the other two were unable to deliver as promised. You now are preparing your final report as your program is ready for closure. However, as you prepared your report, you realized there were some other items you needed to complete to finalize the program. You also want to acquire all intellectual property from the core team, component managers and teams, and suppliers. Assume you then have your final report completed and approved. It then is important to—
- Conduct contractor performance reviews for future programs and projects
 - Evaluate the organization's documented contract closure procedures
 - Focus on knowledge transfer
 - Release any resources and reallocate them

109. Assume your business case for the next generation nuclear submarine program was approved, and you have identified about 50 benefits but are focusing on the top five – to provide the most complete submarine possible; to use state-of-the-art technology, to deliver the submarine with the highest possible quality, to adhere to safety concerns so no accidents occur, and to abide by all environmental concerns. You have prepared a roadmap as there are many components, and each one will provide its benefits incrementally. You also prepared a benefits management plan. Now you are leading your team to deliver the benefits, which means you are—
- Defining roles and responsibilities to manage the benefits
 - Determining how benefits and capabilities will be handed over to operational units
 - Updating realized or obsolete risks
 - Verifying components as benefits are delivered meet realization criteria
110. You are the program manager for a new accounting system that will affect more than 500 accounting professionals in 10 locations. You have a core team of five people, and your preliminary schedule shows that in month 13, the transition of your system to the users will begin. This aggressive schedule recently was made even more difficult as every program in your company will have a five percent budget cut; this means it will be even harder for you to get the key subject matter experts you need when you need them. You have set up a stakeholder register and are using it to—
- Provide an inventory of how each type of stakeholder will be impacted the program
 - Provide a way to make sure the key stakeholders remain engaged in the program
 - Show how best to manage the impacts of the program on stakeholders
 - Report and distribute program deliverables and formal and informal communications
111. You and your team have prepared your stakeholder register for your organizational change program. In preparing it, you and your team used which of the following techniques—
- Brainstorming
 - Organizational analysis
 - Interviews
 - Open-ended questions

112. Assume you are leading your company's PMO. Each program over \$500,000 has a program steering committee, and program management is a recognized and sought-after profession. The concept of governance oversight, phase-gate reviews, and performance reviews is entrenched. As the PMO Director, you feel continuous improvements are imperative in the turbulent environment in which the company works. A source for ideas for continuous improvement is—
- Lessons learned in the program formulation phase
 - Program reports
 - Feedback on training conducted
 - The effectiveness of organizational change management support
113. You are the program manager to restructure your entire government agency. Since no one likes change, you are holding meetings every two weeks that are recorded and made available to everyone in the Agency as to your progress. You are requesting comments from people throughout the Agency after each meeting. You feel these meetings tend to show different stakeholders participate with perhaps different areas of interest, so you then need to—
- Update your stakeholder register
 - Update your communications log
 - Strive to focus on risks as opportunities
 - Conduct a program impact analysis
114. Working in portfolio management and helping program managers prepare the business case for new programs in your chemical company, you want to make sure each program supports at least one of the objectives in your company's five-year strategic plan. You encourage one program manager to meet with the strategic planners to make sure there is alignment and to make sure the strategic planners do not expect any major changes in the next three years, the proposed length of the program. One best practice is to prepare a high-level roadmap and continue to use it during the program. The roadmap is important as it—
- Serves as a high-level master schedule
 - Includes results of assumptions analysis
 - Outlines major program events
 - Shows the status of all the components

115. Working as the program manager for your city's water-alleviation program, you have an outstanding core team of five subject matter experts and a Program Management Office to support you. So far, you have three projects in your program. As you create your program work breakdown structure (PWBS), decomposition is useful to identify program deliverables and related work. The decomposition process is complete when—
- Each phase of the program life cycle has been detailed
 - The program manager has the desired level of control
 - The work packages of the various projects in the program have been identified
 - Verifiable products, services, or results from each project have been determined
116. Continuing to work on your water-alleviation program in your city, you and your team now have prepared your program's work breakdown structure. This turned out to be a far more difficult process than you imagined because in the past, you had templates you could use to assist you in preparing the PWBS. However, you and your team completed it. The next step is to—
- Organize the work
 - Prepare the program schedule
 - Develop cost estimates
 - Prepare a scope management plan
117. You are pleased to be the program manager for a new water alleviation program in your city. So far, you have three components in your program. Six months after your program management plan was approved, the city issued some new regulations, and you requested approval and received it to add a new project to address regulatory compliance. However, you recognized this project will consume extensive time, and it will affect other program components. Your next step is to—
- Request additional resources and reprioritize some that now support the other projects
 - Suggest to the program steering committee that this project be moved from your program to be a distinct program
 - Determine if new quality standards are required
 - Acquire the services of a qualified vendor to manage the new project

118. As the program manager for your city's water alleviation program, you have many challenges. So far, you have four components in your program. One challenge of course is the aggressive schedule you must meet and the high priority of this program in your company's portfolio. You also have a number of technical SMEs on your program, who seem to want to really work on technical topics in a functional environment. Also, as program manager you must work with stakeholders at all levels as well as with your team and your program steering committee. Your flexibility in managing this program is limited by—
- Communication channels
 - Constraints
 - Assumptions
 - Benefits analysis
119. For your water-alleviation program, you have many challenges. Fortunately, you have your program team and have a dedicated PMO. You also have met individually with your key stakeholders. You regularly communicate with your program sponsor. So far, you have three projects in your program. Your program team uses earned value at the program package level. Your cost performance index (CPI) is at 0.67, although the schedule performance index (SPI) is at 0.88. Your team recognizes the cost overrun and the fact that you are only 15 percent into the program. The team revises the Estimate at Completion, and you present the revision to your program steering committee. The Estimate at Completion is—
- A forecast
 - A trend
 - Atypical
 - An inappropriate technique at this time
120. You have been managing your city's water alleviation program for three years. Fortunately, you had an outstanding program team and had a PMO. Your project managers have diligently completed their projects, and their deliverables have been accepted by the City. Now, the program is officially complete, as all deliverables have been accepted by the City. Your next step is to—
- Prepare your closure report
 - Archive your program records
 - Meet with the sponsor for a closure review
 - Obtain a signed final acceptance from the customer

121. You are the director of your telecommunications company's enterprise project management office (PMO). Your company has more than 200 projects under way, and you are considering managing some of them as a program. It took about six months to even determine how many projects were in process as many people felt if they described every project they worked on, their "pet" project that they felt would really benefit the company might be canceled. Obtaining the trust of the project professionals was a major challenge, but you believe you have an inventory now of all the project work. As you move into program management, which of the following is best suited to manage as a program?
- a. Conducting a training class in program management
 - b. Providing product support to a recently introduced cellular phone
 - c. Developing the next-generation cellular phone and related products
 - d. Preparing a marketing campaign to introduce the next phone when it is developed
122. Leading organizations in diverse fields have noted the importance of governance for effective programs and to ensure programs are completed successfully as defined by their business case. To begin to establish governance practices, the first step is to—
- a. Prepare a governance plan
 - b. Follow processes established by the Enterprise PMO
 - c. Define governance goals for each program
 - d. Have a sponsor organization
123. You are managing a program to develop a new source of energy to use in the tropics when solar power is not available. Working with your core program team and your program steering committee, you identify a number of component projects. However, several other key projects are under way in your company, and resources will be difficult to acquire for a new program. In determining whether you will use internal or external resources, you should consider—
- a. When the resources will be needed
 - b. Your ability to negotiate with functional managers for the needed staff
 - c. Previous work by the staff as a successful team
 - d. The need to advertise for the open positions

124. You are managing a program to develop a new source of energy to use in the tropics when solar power is not available. Working with your core program team and your program steering committee, you identify a number of component projects. You also have identified some program activities. Analysis of program costs must be performed, although some overlook the need to consider the program infrastructure cost activities. You are, however, analyzing them on your program as you believe doing so is a best practice for program and project managers. Accordingly, they—
- Should be tracked outside the program's budget
 - Should be within expected parameters
 - Are part of earned value
 - Are an expense to be consumed by the program
125. Assume you have sponsored a program to develop a new stent for coronary patients that is based on new laser technology and that will only take 30 minutes from the time the patient actually enters the hospital. Then, the patient will be able to be discharged and resume normal activities as if nothing happened. The patient will not experience any side effects from this new approach. You have obtained approval from your program steering committee to develop this program in more detail, so you are now in program formulation. Once the charter is approved—
- The program's financial framework is prepared
 - A draft communications management plan is prepared
 - The program is linked to the ongoing work and strategic priorities
 - A high-level plan for components is prepared
126. Assume your company has a new program to develop a new stent for coronary patients that is based on new laser technology and that will only take 30 minutes from the time the patient actually enters the hospital. Then, the patient will be able to be discharged and resume normal activities as if nothing happened. The patient will not experience any side effects from this new approach. As a project manager, when you prepared your schedule, you focused on identifying activities on your critical path and managing them aggressively. You have been promoted to program manager. Your focus now is on—
- Estimating program activity duration
 - Using a critical chain to incorporate buffers and manage drum resources that affect your component projects
 - Identifying interdependences among the components
 - Performing “what if” analyses to ensure that the key stakeholders' expectations for program deliverables are met

127. Recently, a member of your core team on your program for the next generation air traffic control system in your country obtained his Risk Management Professional credential from the Project Management Institute. While you and your core team spent time early in the program preparing a risk management plan, which was approved by your Governance Board, and you have been maintaining a program risk register, this core team member felt you and the other team members needed to perform another in depth session identifying risks given that the program had slightly changed direction during the past year and had added one more project than planned. Also, the Administrator of your government agency resigned to take a position in industry, and the new Administrator is more risk adverse, especially where new technology is involved. You have a choice of different technologies to employ. As you considered each one in terms of possible risks, you and your team used which of the following techniques to best make a recommendation to the Administrator and the steering committee in terms of overall program benefits—
- Sensitivity analysis
 - Probability analysis
 - Decision-tree analysis
 - Risk urgency analysis
128. In developing your benefit management plan for this air traffic control upgrade system, you and your core team set it up in order that you would have specific metrics in place to help monitor the actual realization of the benefits throughout the program. The plan includes both tangible and intangible benefits of this major program. While most of the tangible benefits are easy to monitor, you now are finding the intangible benefits to be a challenge. One approach that has been useful to you so far is to use—
- Value management
 - Total cost of ownership
 - Cost of quality
 - Trend analysis

129. In your role as program manager for your country's food safety department to ensure the safety of imported food in your country, you are facing a number of challenges. It seems as if more imported food is arriving rather than producing the food domestically. Many of the food products are totally new to your country. You lack the needed number of inspectors who have expertise in some of the exotic food that now is being imported, and you are implementing a Hazard Analysis Critical Control Program approach as part of this important program. You realize you needed a program steering committee to assist in ensuring your program continues to meet the Department's strategic objectives. Your sponsor agreed and assisted you in preparing a governance plan and also obtained commitments from senior level executives in the Department to be committee members. As you worked on your plan, you realized a key activity that occurs within governance is—
- a. Resource prioritization
 - b. Issue management
 - c. Risk response planning
 - d. Transition planning
130. Change is constant with mergers, acquisitions, technology, staff turnover, to list a few. But in managing a program, a key job of the program manager is to ensure the program remains aligned with the organization's strategic objectives. To do so, the program manager needs to—
- a. Interface often with the strategic planning group
 - b. Ask the Program Selection Committees to also serve as your Governance Group
 - c. Monitor environmental factors
 - d. Conduct monthly performance reviews
131. No one likes to prepare cost estimates since almost every estimate turns out not to be accurate even if you have outstanding historical information to help you in this process and organizational templates. However you have prepared your estimate and financial management plan. Your next step is to—
- a. Publish this cost estimate
 - b. Prepare the budget baseline
 - c. Determine program financial metrics
 - d. Have component managers prepare component cost estimates

132. You realize since your company recently merged with a competitor, and there is a revised strategic plan that for your program to continue to be in alignment, you need to add a new project. To do so, you require approval from your program steering committee, and the committee's approval generally requires—
- Highlighting any possible risks
 - Ensuring compliance with existing program processes and procedures
 - Ensuring communication of critical component-related information to stakeholders
 - Confirming the business case for the new project
133. You are managing a program to build your country's new embassy, consulate, residences, and other facilities in a country where your country has never had an embassy in the past. It is a giant construction program requiring more than 50 contractors working on 20 components. Many of the program team members will work on site for the program's duration, and as the program manager, you plan to travel there every other week. You now are issuing Requests for Proposals, Requests for Quotations, and Invitations to Bid for the various types of contracts you determined you would need. For the most effective management of these contractors, you decided to—
- Centralize them at the program level
 - Have component managers determine the contracts needed
 - Add professionals in the construction business and in contract administration to the program team
 - Train the program team in contract administration
134. Managing a program to improve the services of your city government to elderly people, you have six projects in progress. Your program is to be completed in two years. Project Manager B met with you today and requested a change to the scope of her project. She noted that this scope change also affected Projects A and E, which is why she is escalating it to you. The next step should be to—
- Convene a meeting of all six project managers to discuss the ramifications of this change
 - Evaluate the change request
 - Ask a member of your core team to analyze the change request and determine its impact in terms of overall program benefits
 - Meet with your program steering committee to inform them of this change and receive their authorization to implement your response

135. One approach useful in stakeholder engagement is to think of it as a ‘two-way’ street, and it can be displayed in a stakeholder map. While the map has many purposes, it is especially useful to—
- Show stakeholder expected benefits and their expected contributions
 - Present ways to influence stakeholders
 - Display communications and data management requirements
 - Present opportunities to assess achievability
136. On your program you and your team prepared a detailed stakeholder register. You also categorized stakeholders and in doing so obtained information to better understand the organization’s culture, politics, concerns and the impact of the program. You then prioritized your stakeholders. As the program manager, a best practice to follow is to—
- Establish a balance between people who have negative views about the program and those who are advocates
 - Work diligently with stakeholders that have been identified as program resistors to better understand there issues
 - Address ongoing program activities and evolving stakeholder needs
 - Prepare a stakeholder management strategy
137. You are a member of your insurance company’s Program Selection Committee, which is considering four possible programs to pursue. Each one has identified benefits that will support your company’s overall strategic plan. Program A is estimated to cost \$100,000 to implement and will have annual net cash inflows of \$25,000; Program B is estimated to cost \$250,000 to implement, with annual net cash inflows of \$75,000; Program C is estimated to cost \$300,000 to implement, with annual net cash inflows of \$80,000; and Program D is estimated to cost \$500,000 to implement, with annual net cash inflows of \$225,000. You should recommend that your company select—
- Program A
 - Program B
 - Program C
 - Program D

138. You are managing a program, BBB, for your manufacturing firm. You have decided that since you have five projects in your program (three were under way before the program officially began), you will need to use contractors to supplement available resources. While some contracts will be ones at the program level, some have been awarded already at the project level on the existing projects. The best approach to follow for these existing contracts is to—
- Conduct regular supplier performance reviews
 - Have one provider that supports several projects
 - Have service level agreements
 - Have the component managers report procurement results to the program manager
139. You are the program manager to reduce the number of shootings of any kind in your city. A neighboring city has had attacks at two schools, a restaurant, and a food store. Your City Commissioner wants to do all it possibly can to reduce the risk of shooting in your city. You have his full support and the support of the police force. You know you need to represent the views of all your interested stakeholders, which means you also have to consider the gun rights activists in your country. You are preparing your charter to present to the Commissioner, and it is to be done on Friday. In it you have a section of possible risks, which you derived primarily from—
- Identifying the key risks and the likelihood of the impact they may occur
 - Developing a list of the five most important risks through focus group meetings with stakeholders
 - Interviewing key stakeholders including people from the neighboring city
 - Brainstorming possible risks with your sponsor and the members of the portfolio group
140. You have been the program manager for an aerospace company on its stealth shield aircraft program now for five years and officially closed the program. However, your product support team monitors the product from a reliability and availability-for-use perspective and compares it with the expected performance, which was predicted when the product was developed. The team cites a need to improve reliability and uncovers various anomalies in the software system. Your best approach in this situation is to—
- Use a sustaining activity to perform the upgrade
 - Contact the client and all stakeholders immediately
 - Support this new problem independently of the program through an operations function in the company
 - Relinquish the product support function to the client

141. You are the manager for a wind-energy program that will last for eight years. You identify a number of components and expect to add others as the program proceeds, especially since this program will last such a long time. Although you have fully staffed your program team, you realize that some of your core team members and project managers will leave the organization or your program for other opportunities. You have decided to facilitate the development of your team members and in doing so perhaps turnover will be minimal. A best practice to follow is—

- a. Set up a succession program for career advancement
- b. Determine the team members' motivational styles
- c. Motivate and mentor team members
- d. Set up a 360-degree performance evaluation system

142. On your program you have a large number of stakeholders, many of whom are not supporters. To listen to their concerns as you work with these stakeholders over this large and complex program, you should—

- a. Follow your stakeholder engagement strategy
- b. Update your stakeholder register
- c. Use an issue log
- d. Update your communications plan

143. You are a member of your energy services company's Program Selection Committee, which is considering a number of possible programs to pursue. Each one has identified benefits that will support your company's overall strategic plan. You have the following data on four possible programs. You may select only one because of resource limitations.

<i>Program A NPV at</i>	<i>Program B NPV at</i>	<i>Program C NPV at</i>	<i>Program D NPV at</i>
5% = 3,524	5% = 2,201	5% = 6,400	5% = 3,055
10% = 2,901	10% = 2,254	10% = 3,275	10% = 2,857
15% = 1,563	15% = 1,632	15% = 1,679	15% = 1,125

Note: NPV = net present value.

You should recommend that your company select—

- a. Program A
- b. Program B
- c. Program C
- d. Program D

144. Assume you have been reading various surveys about the success rate of programs and projects. While the success criterion for programs is benefits realization, you have found that costs typically exceed the estimate and budget. Often, the costs are great, and no one wants to stop the program even though the sunk costs are too high and cannot be recovered after a certain point in the program. You do not want this to happen to your program, and you know no one likes to estimate as the estimates tend to be wrong. You have an expert in the field helping you as you plan your 5 million USD program with 20 components identified to be part of it. As you prepare your estimate, you should—
- a. Review the initial cost estimate in the business case
 - . b. Prepare a list of all the types of resources you will need and determine the number and costs of each one
 - c. Prepare your roadmap and then use it as you prepare your estimate
 - d. Base your estimate on the ten associated benefits the program is to deliver
145. Quality is essential in IT projects especially in complex ones such as enterprise resource planning software development and implementation. A quality management plan contains—
- a. Standard templates
 - b. A schedule for planned quality assurance audits
 - c. Checklists
 - d. A method to handle change requests from quality assurance and control results
146. Assume you are the program manager to implement enterprise resource planning software in all the agencies in your province. This program would be difficult if it were limited to only one agency, but it is especially hard because you have 17 agencies in the province, and each one has its own legacy system that it uses. The executive director of your program steering committee suggests that you explore local consulting firms for additional resource support. As you do so, you want to ensure you obtain the best firm to assist you with the most qualified staff and track record in this field. Therefore, your best approach is to issue a(n)—
- a. Request for Proposal
 - b. Invitation to Bid
 - c. Request for Quotation
 - d. Blanket Purchase Agreement

147. Introducing program management to your electric company has been a challenge but is finally being embraced as executives to team members now are seeing that using programs can produce more benefits to the company and its customers than if projects were managed in a standalone way. One approach that has been useful to you in your role of leading this culture change in the electric company has been to prepare a benefits management plan and to get it signed off by your sponsor, members of the Governance Board, and other key stakeholders. Your company also uses the balanced scorecard approach, and your benefits management plan considered it when you developed it, so the benefits are aligned to the scorecard. However, often overlooked is—
- Cost of quality
 - New income
 - Competitive advantage
 - Risk appetite
148. One of the first programs you managed at your electric company, DDD, was for a city in Draeger, New York. The purpose was to reduce the numerous power outages so that if a power outage occurred, residents in Draeger would only lose power momentarily until a backup system could be deployed to provide time for on-site personnel to arrive at the location and diagnose the problem and provide corrective action. When you prepared your benefits management plan for this program early on, one of the items you included in it was—
- Review sessions to be held on a periodic basis by citizens of Draeger
 - Methods to maximize citizen satisfaction in the program delivery
 - Activities and systems needed for changes
 - Overall business requirements, including scope and limitations
149. Researchers have noted the emergence of corporate program management and note that its processes must be structured to coordinate and manage the multiple components that together contribute to business value and organizational structure. It therefore is clear that being a program manager is different from being a project manager since required competencies as a program manager are significantly different. As the program manager is being appointed, he or she should have which skills and competencies—
- Marketing
 - Political awareness
 - Analytical
 - Managing benefits

150. Your organization receives an award for the construction of a new courthouse complex in the state capital of State A. Your company is located in State B, approximately 1,000 miles away, and has never worked in State A. You plan to use a number of contractors and to hire local people to support the program team. From time to time, you will need cranes. To facilitate acquiring these cranes, you should—
- Purchase the cranes
 - Develop a qualified seller list
 - Issue an Invitation for Bid
 - Issue a Request for Proposals
151. Your organization receives an award for the construction of a new courthouse complex in the state capital of State A. Your company is located in State B, approximately 1,000 miles away, and has never worked in State A. You plan to use a number of contractors and to hire local people to support the program team and the component teams. You also will use contractors to lease cranes. You have five approved components in your program and have an approved schedule. You also know there always are some type of risks whenever you use contractors. Therefore, it is important as a best practice as the program manager to—
- Only use contractors on the qualified seller list
 - Focus on milestones in the components' schedules
 - Have each contractor prepare a monthly performance report
 - Manage risk in accordance with the risk management plan

152. On your program to redesign all work in the company such that if a person wants to work from home he or she can do so, but if a person wants to come into the office occasionally, there will be a convenient and ergonomically friendly place to work. The office redesign also will ensure each person has up-to-date technology, and the conference rooms are similarly equipped. Recognizing the need for privacy, other parts of the company will be set up with places where one can work rather than in an open space. Other improvements include easier access for people with disabilities plus a bring your dog or cat to work day each month since the company specializes in food for animals. As you manage this program, you are encountering some friction as most of the influential stakeholders wield greater power and authority than you possess as a program manager, and they are threatened by your program since it was initiated by the CEO. The best way to handle this situation is to—
- Talk with each of these stakeholders to get their feedback on your program
 - Ask each of these stakeholders to appoint a person to serve as a liaison between you and your team and the stakeholder's department
 - Practice a transparent communications policy to the program management information system
 - Use a facilitative leadership style
153. You realize in your work as program manager over the past seven years that improvements in performance competencies is desired. In working with your program steering committee, for example, a performance criterion is to assess the performance and viability of the program especially considering the context of organizational standards and objectives. An example of how to meet this performance competency is—
- Preparing a program governance plan
 - Documenting roles and responsibilities
 - Documenting a comprehensive business case
 - Providing input from customers and organizational stakeholders

154. Program governance is an effective way to monitor, manage, and support a program. Assume since you are managing the most effective process to ensure salmonella is not present in any products at your poultry processing organization, and your program is to guarantee that 100% of its products are salmonella free that you decided to set up a program steering committee for your program. You are to complete your program within a year, and you have six components in it thus far. The purpose of a governance framework is to—
- Oversee components and their interdependencies to deliver promised benefits
 - Authorize program investments
 - Ensure the program is managed appropriately
 - Engage stakeholders to ensure delivery of the program's benefits
155. You are the program manager to develop a program for the next generation of drugs to combat joint disease. The executive sponsor has asked that you prepare a comparative advantage analysis to—
- Show “what-if” analysis
 - Proceed with benefit analysis and planning
 - Issue the program mandate
 - Assess feasibility according to constraints
156. In your governance plan, you have a section on roles and responsibilities for key decision-making categories and also boundaries. In meeting with the five members of your program steering committee, everyone agreed the sponsor should be its chair and have overall decision-making responsibilities. But to engage all the members, you decided each person should be the key decision maker for certain parts of the program. For example, since your program is complex and using state-of-the art technology, you have the Chief Technology Officer on the committee, and he is responsible for decisions concerning technology and other technical issues. An example of boundaries is—
- Phase-gate reviews
 - Health check meetings
 - Escalated risks
 - Stakeholder engagement

157. You are managing a program to evaluate all the regulations at the Federal Trade Commission to see if they are outdated and still needed or need revision. You were hired by the Commissioners because you successfully managed a similar program at the Federal Communication Commission. Now, the difference is you had worked at the Communications Commission before and knew people throughout it in the various departments and had long-standing relationships with them. You were given a charter by the Chairman, and the other Commissioners signed off on it to manage this program, which gives you the authority to acquire and manage the needed resources to complete the program and realize its benefits. But since you are new, you are unsure who should be on the team, and you know you need SMEs from each group. You met with the heads of the units in each part of the Commission, and they agreed to help and provided you with one person work full time on your program. At the kickoff meeting, you realized—
- People are pleased to work on your program as it is the number one priority in the Commission
 - Two SMEs dislike each other so much they are not going to participate
 - You believe after the introductions you have a team with the needed competencies
 - You decided the first step as to set up a roles and responsibilities matrix
158. You are managing a construction program that will be to construct a completely new electrical system in another country. Now you are in the design phase, and for both the design and the construction phase, you will be using contractors for much of the work. During the construction phase, you know it will be difficult to obtain the contractors you need, so you decided the best approach was to partner with the government of the country where you will be working. Now you are preparing your procurement management plan and will involve the country's government representative in the process. In addition, you know you will need the services of other contractors as well since the program is important and is in a difficult area of the country to reach. Obtaining contractor services and managing them effectively will be a major responsibility during program delivery. This situation means as you prepare your procurement management plan that you—
- Review your roadmap
 - Review your procurement management assessment
 - Consider as you work with your Procurement Office the different types of contracting vehicles available
 - Recognize since it will be a public-private partnership, the laws of the other country will prevail

159. You are a member of your organization's Program Selection Committee. The company's strategic plan includes five major goals, which are all weighted equally. Goal 1 is to fall within the time-to-market window; goal 2 is to reduce operational costs; goal 3 is to differentiate the products from others on the market; goal 4 is to deliver the highest-quality product; and goal 5 is to promote economic sustainability. At the next committee meeting, you will consider four programs and recommend one. Program A partially supports goal 1, fully supports goals 2–4, and does not support goal 5. Program B fully supports goals 1, 3, 4, and 5, but does not support goal 2. Program C fully supports goals 1 and 2, partially supports goals 3 and 4, but does not support goal 5. Program D partially supports goals 1, 2, and 5, and fully supports goals 3 and 4. With this information, which program will you recommend?
- a. Program A
 - b. Program B
 - c. Program C
 - d. Program D
160. You are managing a complex program to develop the next-generation submarine. It is planned to replace the existing non-nuclear submarines in your country with nuclear weapons. It is estimated to take about nine years to complete as you will be using new technology now not available in your country. The program includes a number of components, and you plan to use contractors extensively. You also plan contracts for services to support the program since it will be constructed in another country. As the program manager, you need to—
- a. Use qualified seller lists
 - b. Document proposal evaluation criteria
 - c. Prepare a contract administration plan
 - d. Prepare component cost estimates

161. You decided your program to upgrade the rural areas in your part of your country was a greater undertaking than you thought. You were asked to be the program manager from the mayor of your Community. The area has lost revenue as it had three major corporations there, but each one shut down their plants. Many people are unemployed so one of the components in your program is to attract business to your area recognizing you have a labor force to support them. You also want to attract a university there so people have an opportunity to further their education and learn new skills as the university will also focus on technical areas. Since the program is complex, and everyone in your area is a stakeholder, you decided to set up a program steering committee with the mayor as its chair. You plan to use them to—
- Engage stakeholders in the area to support the program
 - Endorse or approve recommendations regarding your program
 - Have the committee meet with the program team so they understand its role
 - Have the committee meet with individual groups to encourage people not to leave the area
162. Your organization recently conducted an Organizational Maturity Assessment. The assessment results and the improvement plan showed much work needed to be done in portfolio management. It was especially apparent that only one program had a defined business case that had been prepared by the program manager working with the sponsor and then approved by the Portfolio Steering Group. After receiving the reports from the maturity assessment, you held a focus group of program managers, sponsors, and key stakeholders to determine why business cases were not regularly prepared. It turned out many of the people in the focus group lacked an understanding of the benefits of preparing one. You explained that the primary benefit is to—
- Establish alignment with strategic goals
 - Provide a perspective on how best to execute the program
 - Determine how the program will help the organization meet its business and strategic goals
 - Make the portfolio process more effective

163. Your organization announces that funds in all areas will be cut by 10 percent. Even though you are still in the planning stages and your program is a high priority for your company, your program is not exempt from the budget cuts. Management has also mandated certain delivery dates that will be hard to meet with the budget cuts. As you decide which program components should be handled internally and which should be outsourced, you should consider the—
- a. PWBS
 - b. Program scope statement
 - c. Make-or-buy analysis
 - d. Qualified seller lists
164. Assume that your program for Draeger, New York is in its final stages. The purpose was to reduce the numerous power outages so that if a power outage occurred, residents in Draeger would only lose power momentarily until a backup system could be deployed to provide time for on-site personnel to arrive at the location and diagnose the problem and provide corrective action. Recently, there was a power outage in one part of the City. The new power station's backup capability was available in less than two minutes. This was an outstanding response time, but Governance as a best practice should—
- a. Review the program's scope statement
 - b. Conduct a customer satisfaction survey
 - c. Review the quality assurance plan
 - d. Review the benefits management plan
165. In determining whether to pursue a program, it is important to assess goals and objectives. In your new product development organization, time to market and high quality are expected and are the critical metrics for success. Quality goals that are too low may lead to customer and end-user dissatisfaction, whereas goals that are too high may result in a high cost to the business. Therefore, it is important to—
- a. Conduct a comparative advantage analysis
 - b. Determine the value proposition
 - c. Assess cash-flow management requirements
 - d. Conduct a SWOT analysis

166. As part of your procurement management plan for this new product development program, you have explicitly stated the actions that you and your program team can take on its own and those that require involvement by or should be deferred to the Procurement or Contracting Department. As you prepare your procurement management plan, the best practice is to optimize procurements to meet program objectives and deliver benefits. To do so you need to—
- Address commonalities and differences across components
 - Review your resource management plan
 - Use pre-negotiated contracts and blanket purchase agreements
 - Direct procurements to be centralized at the program level
167. You are Company A's program manager for the development of an online banking system for your community bank. One of its objectives is to make sure all transactions are secure. You have a large team supporting you as program manager, and you have four projects thus far. Two of the project managers are new to your company and lack familiarity with the company's standard program management procedures. Because time and quality are of the essence in this program, you are need to make sure these two project managers understand what must be done to comply with the various procedures. Your best approach to do so is through—
- One-on-one meetings each day
 - Developing an on-line training system to show all the various procedures to follow
 - Making information available through the information repository
 - Using skills in creative thinking
168. You are Company A's program manager for the development of an online banking system for your community bank. One of its objectives is to make sure all transactions are secure. You have a large team supporting you as program manager, and you have four projects thus far. Two of the project managers are new to your company and lack familiarity with the company's standard program management procedures. You have set up a change management plan as you know programs involve change and with this program and its four projects, changes will occur. You especially want to use it to help control—
- Benefits
 - Issues
 - Quality
 - Human resources

169. Assume you are to be the program manager for a new program in your company. You have identified tangible benefits such as a one-year payback period, a high return on investment, and an increase in productivity by 25 percent. Some of the intangible benefits you have identified include an increase in employee morale with retention of intellectual property. You also believe it will contribute to knowledge sharing. You are getting ready to present your business case to the Portfolio Review Board. Before doing so, you want to make sure it has been completed properly so you first should—
- Present a cost/benefit analysis
 - Link the program to the company's strategic goals and objectives
 - Identify the Key Performance Indicators
 - Describe the program's components
170. There are different types of governance, each with its own special purpose. Program investments, for example, are authorized by—
- Program governance
 - Organizational governance
 - Portfolio governance
 - Component governance

Answer Sheet for Practice Test 2

1.	a	b	c	d
2.	a	b	c	d
3.	a	b	c	d
4.	a	b	c	d
5.	a	b	c	d
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9.	a	b	c	d
10.	a	b	c	d
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31.	a	b	c	d
32.	a	b	c	d
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37.	a	b	c	d
38.	a	b	c	d

39.	a	b	c	d
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41.	a	b	c	d
42.	a	b	c	d
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56.	a	b	c	d
57.	a	b	c	d
58.	a	b	c	d
59.	a	b	c	d
60.	a	b	c	d

61.	a	b	c	d
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65.	a	b	c	d
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67.	a	b	c	d
68.	a	b	c	d
69.	a	b	c	d
70.	a	b	c	d
71.	a	b	c	d
72.	a	b	c	d
73.	a	b	c	d
74.	a	b	c	d
75.	a	b	c	d
76.	a	b	c	d
77.	a	b	c	d
78.	a	b	c	d
79.	a	b	c	d
80.	a	b	c	d
81.	a	b	c	d
82.	a	b	c	d

83.	a	b	c	d
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85.	a	b	c	d
86.	a	b	c	d
87.	a	b	c	d
88.	a	b	c	d
89.	a	b	c	d
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91.	a	b	c	d
92.	a	b	c	d
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161.	a	b	c	d
162.	a	b	c	d
163.	a	b	c	d
164.	a	b	c	d
165.	a	b	c	d
166.	a	b	c	d
167.	a	b	c	d
168.	a	b	c	d
169.	a	b	c	d
170.	a	b	c	d

Answer Key for Practice Test 2

1. a. Ways to communicate and measure progress

The benefits register is established in benefits identification and updated as the program progresses. It collects and lists planned benefits and is used to measure and communicate benefit delivery during the program.

PMI®, *The Standard for Program Management*, 2017, 47

2. b. Integration

Program managers require a combination of knowledge, skills, and competencies. Integration skills enable the program manager to assess if the components will contribute as expected to the delivery of program benefits and to assess the potential impact of external events on the program's strategy or plans.

PMI®, *The Standard for Program Management*, 2017, 18

3. b. Delivering intended benefits

After the program management plan has been approved, the Program Delivery Phase begins. During this phase, the purpose is to produce the intended result of the components and integrate them with the program to manage and facilitate delivery of intended benefits.

PMI®, *The Standard for Program Management*, 2017, 95

4. b. Note stakeholder considerations in your program charter

It is highly appropriate to perform market research to identify any potential stakeholders who may have an interest in or influence over your program and its component projects. The program charter should describe the key stakeholders, including an initial strategy to effectively engage them.

PMI®, *The Standard for Program Management*, 2017, 93

5. b. Disclose this relationship to the Procurement Director and to your sponsor immediately

Under PMI's "Code of Ethics and Professional Conduct", fairness is a mandatory standard. This situation can easily be perceived as a conflict of interest as in the Code, contracts are not to be awarded based on personal considerations, one of which is nepotism.

PMI®, *PMI Code of Ethics and Professional Conduct*. Available from <http://www.pmi.org/>

6. a. Determine which components are affected

In Program Scope Monitoring and Controlling, the program manager must determine the components that are affected by the requested scope change and updates the PWBS accordingly.

PMI®, *The Standard for Program Management*, 2017, 137

7. b. Collaborative

Both are focused on ensuring program and portfolio managers work together such that the benefits desired or required by the organization are delivered efficiently and effectively.

PMI®, *The Standard for Program Management*, 2017, 12

8. c. Establish a program core team

In Program Infrastructure Development, which is part of program integration management and is initiated in program definition, the management and technical resources of the program are established, including people, program-specific tools, facilities, and finances. The program core team is also established.

PMI®, *The Standard for Program Management*, 2017, 99

9. a. Program charter

The program is closed either because the program charter has been fulfilled or internal or external conditions occurred that caused the program to be canceled. The program manager then reviews the charter to make sure there are no outstanding items.

PMI®, *The Standard for Program Management*, 2017, 102

10. d. Coordinating interdependencies between projects

Program managers focus on coordinating interdependencies between projects and other components in the program, while project managers concentrate on managing project activities. The best approach is for the program manager to foster a collaborative relationship between his or her component managers as they work closely to deliver the program's benefits, so they are transitioned and sustained.

PMI®, *The Standard for Program Management*, 2017, 13

11. a. Provide guidelines for component-level stakeholder engagement

While the stakeholder engagement plan documents how stakeholders will be engaged throughout the life of the program, the program manager also provides guidelines for component stakeholder engagement to the individual projects, subsidiary programs, and other program activities that are part of the program.

PMI®, *The Standard for Program Management*, 2017, 64

12. b. Benefits delivery

During Benefits Delivery, the program manager works actively with governance. Governance conducts benefits reviews to analyze planned versus actual benefits and to focus on strategic alignment and value delivery.

PMI®, *The Standard for Program Management*, 2017, 52

13. a. End user satisfaction

Quality control is performed throughout the program. It is important to ensure components and the program fulfill quality requirements for adequate benefit realization. End user satisfaction is considered a key metric to gauge program quality.

PMI®, *The Standard for Program Management*, 2017, 132

14. d. Focus on ongoing performance and progress

In addition to phase-gate reviews, program steering committees tend to have less formal ‘periodic health check’ sessions between decision-point reviews such as phase gates to assess ongoing performance and progress especially toward the realization and sustainment of benefits.

PMI®, *The Standard for Program Management*, 2017, 56

15. c. Initiating studies of scope, resources, and costs

In the performance element of program formulation, a series of initial assessments are conducted that assist in preparing its output of the program charter. This situation is an example of expectations as one initiates studies of scope, resources, and costs. Examples then are an approved program estimates of scope, resources, add an initial risk assessment, a completed charter, and a roadmap.

PMI®, *Project Manager Competency Development Framework*, 2017, 117

16. d. Investment decision

While the business case contains many items, it is developed to assess the program's investment against the intended benefits. Financial analysis is thus needed since the business case is the primary justification document for an investment decision. The benefits to be achieved must consider the needed costs to do so.

PMI®, *The Standard for Program Management*, 2017, 35

17. a. Using your PMO

While the PMO performs many functions in support of programs, it is not uncommon for it on large and intricate programs to provide support for contracts and procurements.

PMI®, *The Standard for Program Management*, 2017, 21

18. d. Program steering committee approval

Component initiation criteria typically require program steering committee approval. It especially is needed as in this situation when a firm commitment of resources for the program is required or if additional governance structures are required.

PMI®, *The Standard for Program Management*, 2017, 76

19. a. Risk profiles

In preparing the program risk management plan, it is essential to define risk profiles of the organizations involved in the program to construct the most suitable approach to manage program risk, adjust risk sensitivity, and monitor risk criticality.

PMI®, *The Standard for Program Management*, 2017, 120

20. c. Customer satisfaction surveys

During Program Quality Control, it is essential to determine fitness for use of the benefits, products, or services delivered by the program by the end users. Programs therefore often use customer satisfaction surveys as a quality control measurement.

PMI®, *The Standard for Program Management*, 2017, 132

21. c. Convene a meeting of your program steering committee

Program governance activities are conducted throughout the program life cycle. One purpose is to endorse or approve program recommendations and changes. The program steering committee should be consulted about this major change and how best to handle it.

PMI®, *The Standard for Program Management*, 2017, 81

22. a. Benefits delivery

Program managers use program management principles to ensure programs are appropriately planned, controlled, and completed, and the program's benefits are appropriately delivered and sustained.

PMI®, *The Standard for Program Management*, 2017, 9

23. c. Serve as a basis to transition and integrate new capabilities

While the roadmap has many purpose in program management, it reflects the pace to show when benefits are realized, which is needed to serve as a basis for transition and integration of new capabilities.

PMI®, *The Standard for Program Management*, 2017, 37

24. c. Meet with your organizational leaders

You have a conflict as these are competing programs. It is incumbent on you to meet with the organization's leaders as the customer's request also is one in which is not consistent with the organization's background or the core background, experience, skills, and qualifications of its staff.

Project Management Institute. *The Code of Ethics and Professional Conduct*. Available from www.pmi.org

25. a. Balance program resource needs with availability

While a program resource plan is prepared in Program Resource Management Planning, it is one for the entire program as resource requirements are identified. Now, you are working to prioritize resource use across all program components, and the need for resources such as staff, facilities, and materials change. Although resource prioritization guidelines are in the program resource management plan, as decisions are made to change existing components or initiate new components, impacts on resources will occur, often leading to the need to adapt and update the program resource management plan.

PMI®, *The Standard for Program Management*, 2017, 119

26. b. An appropriate governance structure in place

The governance structure ensures the program's goals and objectives are aligned with the strategic goals. This program's original people on the program steering committee include ones with organizational insight and decision-making authority.

PMI®, *The Standard for Program Management*, 2017, 81

27. a. Constraints

Constraints limit the options of the program management team. Once the high-level program master schedule is determined, the dates for each component are identified. These dates are used to develop the component's schedule and are constraints for each component team.

PMI®, *The Standard for Program Management*, 2017, 121

28. c. Track schedule risks

In Program Schedule Monitoring and Controlling, slippages and opportunities should be identified and used in risk management. This means program schedule risks should be tracked as part of the risk management activity.

PMI®, *The Standard for Program Management*, 2017, 137

29. c. Ensure payments were made

In Program Procurement Closure, it is necessary to close out all agreements. This is done after determining all deliverables were completed satisfactorily, all payments have been made, and there are no outstanding contractual issues.

PMI®, *The Standard for Program Management*, 2017, 140

30. b. The program charter

Approval of the program charter is critical as it formally authorizes the commencement of the program.

PMI®, *The Standard for Program Management*, 2017, 92

31. a. Assess the impact of component-level changes

On a program, it is necessary to assess the impact of component-level changes on other components and the entire program. Some components may need to be accelerated or decelerated to achieve program goals.

PMI®, *The Standard for Program Management*, 2017, 136

32. b. Through value delivery

Value is delivered when the organization, community, or other program beneficiaries are able to use the program's benefits.

PMI®, *The Standard for Program Management*, 2017, 53

33. a. Both intrinsic and extrinsic benefits would be identified so plans could be made to achieve them

Maturity assessments can be used for a variety of reasons and tend to be done in about two months. Implementing the recommendations takes longer, and in this situation, various components would be identified to be part of the program. When the maturity assessment is proposed, the business case for it can include identification of the intrinsic and extrinsic benefits that would result.

PMI®, The Standard for Program Management, 2017, 35

34. d. Determine program risks

This situation is a new product line for this company, and the program manager has an aggressive schedule to meet to deliver the program's benefits. Program risks can affect this program, and risk identification is needed. It also is an iterative activity, and new risks may be identified as the program progresses.

PMI®, The Standard for Program Management, 2017, 134

35. b. A prioritized list of stakeholders

Stakeholder analysis is performed before the stakeholder engagement plan is prepared. The program manager categorizes stakeholders to show differences in stakeholder needs, expectations, or influence. The program manager obtains information from stakeholders, and a prioritized list of stakeholders is developed to help focus the engagement effort on those stakeholders with the most influence on the program.

PMI®, The Standard for Program Management, 2017, 61

36. b. Use performance/earned value reports

The program manager maintains visibility in Program Contract Administration to ensure the program budget is being spent properly to deliver benefits. An output is the use of performance/earned value reports to assist in this role.

PMI®, The Standard for Program Management, 2017, 131

37. c. There is compliance with organizational quality policies

Many organization define standardized reporting and controlling processes that apply to their programs. Program governance often assumes responsibility for enforcing compliance of the program with these processes. An example of reporting and controlling processes is compliance with organizational quality policies, which is appropriate since this example includes so many suppliers.

PMI®, *The Standard for Program Management*, 2017, 73

38. c. Use Monte Carlo simulation

Monte Carlo simulation is a sophisticated estimating technique in which a series of iterations are run to determine whether the estimate is one with a high degree of confidence. These iterations are done using computerized approaches.

PMI®, *The Standard for Program Management*, 2017, 113

39. d. Will help establish the PMIS

The core team is established after the program manager is assigned in program definition. The core team is instrumental in determining and developing the program's infrastructure, which includes the PMIS.

PMI®, *The Standard for Program Management*, 2017, 99–100

40. c. Helpful to determine if the program's benefits will be met

Program performance reports include identification of resource use to determine if the program's goals and benefits will be met and summarize the components' progress and the program's status to show overall program status.

PMI®, *The Standard for Program Management*, 2017, 127

41. d. Engage program governance and the program management team

The best approach is to have program governance work with corporate governance and the program management team; they should be responsible to ensure the program risk thresholds are established, observed, and are not forgotten.

PMI®, *The Standard for Program Management*, 2017, 41

42. d. You are using the results of your schedule assessment

The Program Schedule Assessment activity has a number of items. One is to identify where alternative actions could be initiated if the schedule activities have excessive delays.

PMI®, *The Standard for Program Management*, 2017, 108

43. a. Use adaptive change

Although the program management plan and roadmap will show the intended program direction and its benefits, the entire suite of components may not be known. The program manager should provide oversight during the benefit delivery phase and if necessary replan for proper integration or changes in program direction through adaptive change.

PMI®, *The Standard for Program Management*, 2017, 95

44. c. It is reflected in the roadmap

Among other things, the roadmap serves as a chronological depiction of the program's intended direction. It shows progress toward achieving benefits.

PMI®, *The Standard for Program Management*, 2017, 37, 47

45. d. Visually shows stakeholders' current and desired support and influence

Mapping is a useful tool to analyze stakeholders and put them into various categories. The map visually represents the interaction of all stakeholders' current and desired level of support and influence regarding the program.

PMI®, *The Standard for Program Management*, 2017, 62

46. d. Obtain information from stakeholders to better understand the culture, politics, and concerns about the program

The first step is to obtain information from stakeholders to better understand the organizational culture, politics, concerns, and impact related to the program. Information is gathered using historical information, interviews, focus groups, and questionnaires or surveys.

PMI®, *The Standard for Program Management*, 2017, 62

47. b. Producing the intended results of components according to the program management plan

The program delivery phase is consumed by producing the results of the components, and the program manager and the program team provide oversight and support to facilitate delivery of the program's benefits. The program manager works to manage components in a consistent and coordinated way to achieve results through the program structure.

PMI®, *The Standard for Program Management*, 2017, 95

48. c. Roadmap

The roadmap is used throughout the program, and it is prepared as one of two key documents after the program is approved. It is a valuable tool to manage the organization of the program and to assess the progress being made to achieve the expected benefits.

PMI®, *The Standard for Program Management*, 2017, 35–36

49. a. Operational areas

Even after the program life cycle ends, benefits management allows the organization to realize and sustain the benefits from its investment. The program manager ensures that this is accomplished within the framework of ongoing operational areas in the organization.

PMI®, *The Standard for Program Management*, 2017, 53

50. b. The program charter

Stakeholder engagement planning is done to outline how program stakeholders will be engaged in the program. After analyzing the stakeholder register and map, consideration then is given to the program charter, the organization's strategic plan, and the business case to better understand the program's environment.

PMI®, *The Standard for Program Management*, 2017, 63

51. d. Follow the issue escalation process

The issue escalation process should be used in this situation to escalate this issue to your program steering committee and involve them in the decision-making process to resolve the issue in a timely way. The expectations for risk and issue escalation are documented and communicated to define the requirements as to when to involve the program steering committee.

PMI®, *The Standard for Program Management*, 2017, 73

52. b. Monitor contract expenditures

In this situation, resources have been leased. The program manager in Program Financial Management is responsible for monitoring and controlling expenditures to ensure the program meets its funding goals. He or she must monitor contract expenditures to ensure funds are distributed according to the contracts. In this situation, it is unclear as to how much has been spent to lease these resources, but in some situations, if there are significant cost impacts, the program's baseline budget is rebaselined.

PMI®, *The Standard for Program Management*, 2017, 127–128

53. b. The business case

The business case is the formal document with the program benefits, the expected delivery, and the justification for the needed resources.

PMI®, *The Standard for Program Management*, 2017, 47

54. b. Plan the transition from program management to operations

Through benefit sustainment the ongoing sustainment activities are transferred to operations or subsequent programs. The program and component managers plan for ongoing sustainment during the program. One aspect is to plan the transition of product or capability support from program management to operations.

PMI®, *The Standard for Program Management*, 2017, 55

55. b. Human resource requirements

Human resources are limited in all organizations. In selecting a program, it is necessary to consider the estimated resources, including those who are full time, plus any specialist expertise resources and where they are in the organization. The estimated human resources should be included in the preliminary business case.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 169

56. c. Facilitate the adaptive realignment of the program's approach

Effective governance is extremely useful in complex and uncertain environments. These discussion forums are useful in that they will facilitate the adaptive realignment of the program's goals and so intended benefits can be delivered.

PMI®, *The Standard for Program Management*, 2017, 69

57. c. Prioritize a list of stakeholders

After the stakeholder register is prepared, information is obtained to better understand the organizational culture, politics, and concerns about the program and its overall impact. From this information, a prioritized list of stakeholders is prepared to help focus the engagement effort on the people and organizations that are most important to the program.

PMI®, *The Standard for Program Management*, 2017, 62

58. b. Delivering benefits

After the benefit management plan is prepared, the focus shifts to delivering the expected benefits as defined in the plan.

PMI®, *The Standard for Program Management*, 2017, 51

59. b. Suppliers are now a major stakeholder

In this situation, suppliers [product and service providers] are a major stakeholder especially because of the changing policies and procedures in your organization. They require communications about this change and will need interaction with the program manager and his or her team, so they do not become negative stakeholders.

PMI®, *The Standard for Program Management*, 2017, 61

60. a. Knowledge transfer tools

They are part of documents, data, and knowledge repositories as it is important to share knowledge during the program and then transfer it to others, maintaining it in a knowledge repository.

PMI®, *The Standard for Program Management*, 2017, 100

61. a. Use human resource planning

The program manager is responsible for prioritizing resources that are not available in abundance and optimizing their use across program components. He or she often uses human resource planning to identify, document, and assign program roles and responsibilities to individuals or groups.

PMI®, *The Standard for Program Management*, 2017, 133

62. b. Prepare a change request

A key activity in Program Scope Monitoring and Controlling is to set up a change management activity. The first step in it is to capture requested scope changes following the program change management and the program scope management plans.

PMI®, *The Standard for Program Management*, 2017, 137

63. c. You need to understand and address the changing environment on your program

Programs typically last longer than an individual project and are more complex. During the life of the program, the environment may change because of numerous factors, such as politics, regulatory and legislative issues, and other factors outside of your control. When these changes occur, then various stakeholders may have a greater level of interest and influence than those you originally identified, and others may have less interest.

PMI®, The Standard for Program Management, 2017, 57

64. a. You have to balance their interests

On a program, there are positive stakeholders, ones who are neutral, and ones who are negative. As a program manager, there is a tendency to spend time trying to convert those who are negative or neutral into positive proponents. However, you have to balance their interests, and hopefully you can enlist the support of the positive stakeholders to assist you in working with those in the other two groups. Balancing interests also is important to assist in benefit realization.

PMI®, The Standard for Program Management, 2017, 57, 62

65. d. Monitor interdependencies by program components and how the outcomes deliver benefits.

The purpose of Program Benefits Management is to focus program stakeholders, program sponsors, the program manager and team, the program steering committee, and others on the outcomes and benefits to be conducted during the program. While doing this is a challenge, the program manager, among other things, monitors interdependencies among the outputs delivered by the program components and how they contribute to overall program benefits.

PMI®, The Standard for Program Management, 2017, 43

66. a. Actual versus planned realization of benefits

Program governance uses decision-point reviews, which include assessments of many areas. One is to assess the outcomes of a program component's activities to evaluate the actual versus the planned realization of benefits and another to see then if the program plan requires any revision because of this assessment.

PMI®, The Standard for Program Management, 2017, 75

67. b. Bridge the gap between the current state and the desired future state

The program manager is the champion for change. He or she needs to bridge the gap between the “as-is” state and the desired vision of the future state to show an understanding of the current state and be able to describe the benefits that will accrue as the organization moves to the future state.

PMI®, *The Standard for Program Management*, 2017, 59

68. c. Program Formulation

During the Program Formulation phase, the program components are defined and configured to deliver the program and its intended benefits.

PMI®, *The Standard for Program Management*, 2017, 93

69. a. Programs in the portfolio are focused on alignment to strategic objectives

Portfolio management involves the process of creating, managing, and evaluating a portfolio of strategic initiatives focused on delivering lasting results and benefits. The objective is to align the portfolio to strategic objectives, approving only those components that support business objectives. If the strategic direction changes, the portfolio is reexamined. Together the program and portfolio functions work to support the organization by defining how the organization’s strategic plan will be supported and delivered by prioritized and resourced programs.

PMI®, *The Standard for Program Management*, 2017, 12

70. b. Benefits management plan

The benefits management plan documents the processes to create, maximize, and sustain the program’s benefits. It includes the metrics plus KPIs and procedures to measure benefits.

PMI®, *The Standard for Program Management*, 2017, 50

71. b. Organization’s strategic plan

The benefits register is established during benefits identification and uses the organization’s strategic plan as it shows goals and objectives the program will support.

PMI®, *The Standard for Program Management*, 2017, 46–47

72. d. Prepare a program resource plan

A program resource plan is prepared as an output of Program Resource Management Planning. It is necessary to forecast the expected level of resource use to enable the program manager to identify if there are potential resource shortfalls or conflicts over any resources that are scarce or constrained.

PMI®, *The Standard for Program Management*, 2017, 119

73. b. Prepare a forecast

Forecasts are part of Program Financial Management. They enable the program manager and stakeholders to assess the likelihood of achieving planned outcomes and are prepared on a regular basis.

PMI®, *The Standard for Program Management*, 2017, 128

74. d. Use the contingency plan you prepared in case this risk occurred

Risks will occur on programs, and in this situation, an identified risk did occur. After analysis of it, potential responses can be prepared, and many involve having a contingency plan in place and then trigger conditions to use since the risk occurred.

PMI®, *The Standard for Program Management*, 2017, 135

75. d. The components are producing deliverables as planned, but their benefits are not being realized successfully.

Different components produce benefits at different times. The program manager receives status information and uses it to integrate components into the program activities. In many cases the program manager may need to take corrective action and components may require modification, other components may need to be added, changed, or terminated to ensure benefits will be realized successfully.

PMI®, *The Standard for Program Management*, 2017, 51

76. d. Serve as a reference to refer to past decisions and prepare trend analysis

Lessons learned are captured in a data base and are critical when updating numerous program documents. As part of the Program Information Management activity, a program information repository is invaluable if set up and maintained with quality content especially when one wants to refer to past decisions or prepare trend analysis based on historical information.

PMI®, *The Standard for Program Management*, 2017, 130

77. b. Business case

To help stakeholders establish common expectations of the program's benefits, the program manager provides stakeholders with information from the program charter and the business case to summarize the details of the dependencies, risks, and benefits.

PMI®, *The Standard for Program Management*, 2017, 65

78. d. A SWOT analysis

Environmental analyses are used to assess the validity of the business case and the program management plan. A SWOT provides information to optimize the charter and the program management plan and assists in preparing the risk management strategy. It also may form part of the feasibility analysis and the business case.

PMI®, *The Standard for Program Management*, 2017, 39–40

79. b. Conduct a questionnaire to get everyone in the Agency involved in the process

Given the magnitude of this program in that it affects almost everyone in the Agency to some extent, the questionnaire is a key approach to solicit feedback from stakeholders rather than interviews and focus groups to have a better understanding of the organization's culture, politics, and concerns and impact about the program.

PMI®, *The Standard for Program Management*, 2017, 62

80. d. They want to assess performance against benefit realization and sustainment

Phase-gate reviews are not a substitute for periodic health checks, which are used to evaluate performance against expected outcomes and against the need to realize and sustain program benefits into the long term.

PMI®, *The Standard for Program Management*, 2017, 76

81. b. A detailed strategy for effective stakeholder engagement

Stakeholder engagement planning shows how the stakeholders will be engaged during the program. When the plan is complete, the program manager has a detailed strategy for effective stakeholder engagement for the program based on the current situation.

PMI®, *The Standard for Program Management*, 2017, 63–64

82. b. May require access restrictions

The stakeholder register should be easy to access by the program team, but it may contain political and legally sensitive information. Therefore, access and review restrictions may be needed that the program manager establishes.

PMI®, *The Standard for Program Management*, 2017, 60

83. a. Use change management proactively

Changes are common on programs and their components. A difference in managing change on a program versus that of a project is project managers strive to control change, while program managers view it proactively. The program manager assesses the change to determine its impact on components and the overall program, so change management is used to keep the components and intended benefits aligned with changes in the organization's strategy and with the environment. Program managers can initiate new components or cancel existing ones for effective benefit delivery.

PMI®, *The Standard for Program Management*, 2017, 30–31

84. b. Update the scope statement

Program Scope Monitoring and Controlling is necessary as the program develops to ensure successful completion, and scope changes can originate from many sources. As a result, an output is an updated program scope statement.

PMI®, *The Standard for Program Management*, 2017, 137

85. d. Ensure conditions for closure are consistent with the vision, mission, and strategy

Before submitting the closure recommendation, conditions warranting closure must be satisfied and recommendations for closure are consistent with the organization's vision, mission, and strategy.

PMI®, *The Standard for Program Management*, 2017, 78

86. a. Use an issue log

Since the program team works with stakeholders, it collects and logs stakeholder issues and concerns and manages them to closure. Using the log to track issues helps the program team understand stakeholder feedback.

PMI®, *The Standard for Program Management*, 2017, 65

87. a. Identify and recognize the value the program is to deliver

Business value is defined as the sum of tangible and intangible business elements. Program management optimizes the management of its components to generate business value. The program's business case serves as a formal document of the value the program is to deliver and justifies the needed resources to do so.

PMI®, *The Standard for Program Management*, 2017, 15, 35

88. b. Program formulation

A statement of the program's vision and strategic alignment is included as part of the program charter, which is developed in Program Formulation. The charter's approval by the program steering committee formally authorizes the program to begin.

PMI®, *The Standard for Program Management*, 2017, 92–93

89. a. In the program governance plan

The program governance plan describes systems and methods to monitor, manage, and support the program. It also describes the structure and composition of the participants on the program's steering committee.

PMI®, *The Standard for Program Management*, 2017, 70

90. c. Stakeholder engagement plan

Working to actively engage stakeholders, metrics are needed to measure performance of stakeholder engagement activities, such as meeting attendance and frequency or rate communications with the program team. These metrics are part of the stakeholder engagement plan as it contains a detailed strategy for effective stakeholder engagement among other things.

PMI®, *The Standard for Program Management*, 2017, 64–65

91. d. Historical information

A common way to determine the types of required resources is to review historical information for similar programs and projects. The program manager analyzes resource availability and allocation to ensure the resource is not overcommitted. Limitations in resources must be addressed if the program is to be successful.

PMI®, *The Standard for Program Management*, 2017, 119

92. d. Monitor costs reallocation impact and results between components

A number of activities are performed in Program Financial Management. By monitoring cost reallocation impact and results between the program's components, the program manager is being proactive and is striving to control costs and stay within the budget baseline.

PMI®, *The Standard for Program Management*, 2017, 128

93. a. Change management skills

While a number of key interpersonal skills are needed in program management, the program manager must recognize the dynamic human aspects of each program stakeholder's expectations and manage them accordingly. As programs involve change, and many resist change, the program manager is the champion for change. He or she requires change management skills and familiarity with organizational change management.

PMI®, *The Standard for Program Management*, 2017, 59

94. d. Influence stakeholder behavior

Business analysts collect hard data on stakeholders, while program managers uncover, manage, and process soft data to better understand stakeholder behavior and gain continued stakeholder support for the program.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 96

95. c. Recognize the dynamics of managing stakeholder expectations

All the interests of stakeholders are important ones. As the program manager stakeholder engagement skills are to support the need to manage the complex issues that tend to arise based on stakeholder interactions. This means the program manager must recognize the dynamic of individual and group expectations.

PMI®, *The Standard for Program Management*, 2017, 18

96. b. Followed the issue escalation process

The issue escalation process described in governance operates at two levels, one of which is between component teams and the program management team.

PMI®, *The Standard for Program Management*, 2017, 73

97. a. Establishing the benefits baseline

Preparing the benefit management plan has many purposes. It is the baseline document used to guide the delivery of benefits during the performance of the program.

PMI®, *The Standard for Program Management*, 2017, 50

98. a. The balance between cost and benefit

There are numerous items to include in a program's business case. Among them is cost/benefit analysis.

PMI®, *The Standard for Program Management*, 2017, 35

99. a. Communicating

Program managers require strong communications skills to interact effectively with stakeholders at all levels. It is a key personal competency and involves listening actively, maintaining lines of communications, ensuring information quality, and tailoring communications to the audience.

PMI®, *The Standard for Program Management*, 2017, 18

PMI®, *Project Manager Competency Development Framework*, 2017. 128

100. b. Describe systems and methods to monitor, support, and manage the program

This is one purpose of a governance plan, and it also describes the roles and responsibilities to ensure the timely and effective use of the systems and methods.

PMI®, *The Standard for Program Management*, 2017, 70

101. c. The benefit strategy

The benefit strategy section of the charter is used to provide the approach the program manager will use to ensure the proposed benefits will be realized.

PMI®, *The Standard for Program Management*, 2017, 93

102. a. Review the results of the program quality assessment

Organizational and regulatory quality standards are reviewed as part of the program quality management assessment along with quality constraints, expectations, risks, and controls. This assessment serves as an input to the program charter.

PMI®, *The Standard for Program Management*, 2017, 93, 106

103. b. Perform a program communications assessment

A program communications assessment is an input into the stakeholder engagement plan. During it, given the wide range of stakeholders involved, it is useful to survey the program stakeholders to identify their expectations for its outcomes and interests in being informed and involved as the program is delivered.

PMI®, The Standard for Program Management, 2017, 107

104. c. Governance plan

The governance plan contains several sections, which includes its structure and meeting schedules. This plan may become a section in the program management plan. It also describes the systems and methods to monitor, manage, and support the program; roles and responsibilities; dependencies, assumptions, and constraints; benefits, performance metrics, and measurement; support services; stakeholder engagement; and governance practices.

PMI®, The Standard for Program Management, 2017, 70–71

105. c. The organization's strategic goals would change, but the program managers were not aware of the changes

Organizations face numerous complexities and challenges, which lead to changes in its strategic goals and objectives, but often program managers are unaware of these changes unless there is close collaboration with the portfolio managers. To ensure programs remain in alignment with the organization's strategic goals, they need know about these changes to see whether new projects should be added to the program, and other projects terminated if they do not support the new strategy.

PMI®, The Standard for Program Management, 2017, 12, 33

106. d. Update the program resource plan

In program delivery, the need for staff, facilities, and other resources will change. These fluctuations are common and are equivalent to balancing supply and demand. Adding new components and changing existing ones have resource implications, so the program manager follows guidelines in the program resource management plan, which may need updating as the program ensues.

PMI®, The Standard for Program Management, 2017, 133

107. b. Strategic and operational assumptions

The program steering committee assumes responsibility to ensure programs comply with standardized reporting and control processes applicable to all programs in many cases. One example is compliance with strategic and operational assumptions. Often assumptions turn out to be false. They require review as they can turn into risks at either the strategic or operational areas.

PMI®, *The Standard for Program Management*, 2017, 73

108. c. Focus on knowledge transfer

In Program Information Archiving and Transition, collection and archiving records is the major focus. It further includes the transfer of program knowledge to support ongoing benefit sustainment and to provide the supporting organization with needed information. A best practice is for the program and component managers to formally present lessons learned to their peers through a summary presentation and to make the final report easily available in the knowledge repository so other program managers can learn about the program and know whom to ask for information if they encounter any similar problems or have questions.

PMI®, *The Standard for Program Management*, 2017, 139

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 260

109. c. Updating realized or obsolete risks

During program delivery, new risks may be identified, may be realized, may need to be updated, or may become obsolete. Evaluating opportunities and threats is a continual activity.

PMI®, *The Standard for Program Management*, 2017, 51

110. d. Report and distribute program deliverables and formal and informal communications

The stakeholder register is used throughout the program as it lists all the stakeholders and is used for reporting, distributing program deliverables, and formal and informal communications.

PMI®, *The Standard for Program Management*, 2017, 60

111. a. Brainstorming

Brainstorming sessions with the program team and other stakeholders is useful in identifying stakeholders across the program life cycle. The stakeholder register then is prepared as an essential tool for to lead to effective engagement.

PMI®, *The Standard for Program Management*, 2017, 62

112. b. Program reports

Governance practices are part of the Improve stage of implementing program governance. Identifying improvements are useful to leverage and enhance governance effectiveness. Program reports and lessons learned in during the program definition phases are useful to consult for governance on future programs.

PMI®, *Governance of Portfolios, Programs, and Projects: A Practice Guide*, 2016, 95

113. a. Update your stakeholder register

Stakeholder engagement is a continuous activity on programs as the list of stakeholders and their attitudes to the program will change as the program progresses and delivers benefits. All stakeholders should be appropriately engaged. The stakeholder register than should be referenced, evaluated, and updated as needed.

PMI®, *The Standard for Program Management*, 2017, 64

114. c. Outlines major program events

The roadmap is a chronological representation of the program's intended direction as it graphically shows dependencies between major milestones and decision points. It helps to show the link between business strategy and program work. While it is not a program schedule, it outlines major program events and helps in planning and developing more detailed schedules.

PMI®, *The Standard for Program Management*, 2017, 36–37

115. b. The program manager has the desired level of control

The program work breakdown structure (PWBS) does not replace the work breakdown structure (WBS) on each of the program's projects. From a program perspective, the PWBS should be decomposed to the level of control that the program manager requires, which typically corresponds to the first one or two levels of the WBS of the component projects.

PMI®, *The Standard for Program Management*, 2017, 123

116. d. Prepare a scope management plan

Once the program scope is determined, the scope management plan is prepared. It serves to describe how scope will be defined, developed, monitored, controlled, and verified.

PMI®, *The Standard for Program Management*, 2017, 123

117. c. Determine if new quality standards are required

Quality activities are continuous in a program. Often the program manager will request a quality assurance audit to ensure appropriate updates are performed. Further government legislation and regulations may affect the program, and in this situation, the new regulations mean a new project is added to the program. New quality standards then may be needed for the program.

PMI®, *The Standard for Program Management*, 2017, 132

118. b. Constraints

Constraints are factors that limit the program execution; typically, they affect schedule, cost, resources, or program deliverables. They are common throughout parts of a program and may restrict action.

PMI®, *The Standard for Program Management*, 2017, 164

119. a. A forecast

The Estimate at Completion is a forecasting technique; it is an estimate to complete the remaining work for an activity, program package. A revised estimate to complete is an output from Program Financial Management.

PMI®, *The Standard for Program Management*, 2017, 128

120. c. Meet with the sponsor for a closure review

It is important to review the program's final status to obtain formal acceptance of the program through a review with the sponsor and the program steering committee before authorizing program closure. The program is formally closed after receiving closure acceptance from the program steering committee or the sponsoring organization to formally close the program.

PMI®, *The Standard for Program Management*, 2017, 97

121. c. Developing the next-generation cellular phone and related products

The development of the next-generation cellular phone and related products is best suited to be managed as a program. It will include numerous projects, subsidiary programs, and program activities that should be managed in a coordinated way to obtain greater benefits and control than would be possible if they were managed individually.

PMI®, *The Standard for Program Management*, 2017, 3

122. a. Prepare a governance plan

In establishing program governance practices, first, a program governance plan is prepared. It includes a documented description of the program's governance frameworks, functions, and processes.

PMI®, *The Standard for Program Management*, 2017, 70

123. a. When the resources will be needed

Resource availability should be part of the program resource management plan. Among other things, it indicates availability of the people, equipment, materials, etc., which are required to accomplish program goals and deliverables and may require the program manager to develop a statement of work to acquire the needed resources. In program delivery, resource fluctuations are common, and prioritization decisions are made. The program manager may direct procurements to be centralized at the program level rather than by the individual components and has a variety of contracting vehicles to consider.

PMI®, *The Standard for Program Management*, 2017, 119, 131, 133

124. b. Should be within expected parameters

It is necessary to manage the expenditures on the program infrastructure to ensure these costs are within their expected parameters and do not have an impact on the budget baseline and need corrective actions.

PMI®, *The Standard for Program Management*, 2017, 128

125. c. The program is linked to the ongoing work and strategic priorities

When the charter is approved, the program has formal authority to start. Approval of the charter also links the program to the organization's ongoing work and strategic priorities.

PMI®, *The Standard for Program Management*, 2017, 92

126. c. Identifying interdependences among the components

As a program manager, you must ensure that the individual component schedules and component dependencies are defined that are required to achieve program goals. The program master schedule also includes component milestones that are an output to the program or share an interdependency with other components.

PMI®, *The Standard for Program Management*, 2017, 121

127. b. Probability analysis

A risk structure for benefits should be set up considering the organization's risk appetite and the program's strategic value. Each benefit needs to have a risk probability assigned to it.

PMI®, *The Standard for Program Management*, 2017, 45

128. a. Value management

Value management leads to value delivery. In terms of benefits management it is especially useful to identify and reconcile stakeholder expectations. The objective is to identify those benefits that generate the best value in measuring tangible and intangible benefits.

PMI®, *The Standard for Program Management*, 2017, 52

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 2015, 152–153

129. b. Issue management

Issue escalation is an activity that occurs within governance. Skillfully tracking, managing, and resolving program-level and inter-component issues helps enable effective governance.

PMI®, *The Standard for Program Management*, 2017, 73

130. c. Monitor environmental factors

Internal and external influences can impact programs in ways that are outside of the program manager's control. Considering these factors and the uncertainty of change can affect the alignment of a program with its goals. This means as part of ongoing program management, the program manager must monitor these environmental factors to ensure the program remains aligned with the organization's strategic objectives.

PMI®, *The Standard for Program Management*, 2017, 38–39

131. c. Determine program financial metrics

In Program Financial Management Planning, the program's financial management plan is a key output. However, other outputs are program funding schedules, component payment schedules, program operational costs, and program financial metrics. These metrics are necessary as they are used to measure the program's benefits.

PMI®, *The Standard for Program Management*, 2017, 115–116

132. c. Ensuring communication of critical component-related information to stakeholders

In most organizations, the program steering committee approves the initiation of individual components. Committee approval includes several key activities, one of which is to communicate critical component-related information to key stakeholders. Such communication is essential for stakeholder engagement and support.

PMI®, *The Standard for Program Management*, 2017, 77

133. a. Centralize them at the program level

The program manager often uses a common structure and directs all procurements to be centralized and conducted at the program level rather than at the component level.

PMI®, *The Standard for Program Management*, 2017, 117

134. b. Evaluate the change request

As part of Program Scope Monitoring and Controlling, a change management activity should be established to handle scope changes. After the change request is accepted, the next step is to evaluate it.

PMI®, *The Standard for Program Management*, 2017, 137

135. a. Show stakeholder expected benefits and their expected contributions

The objective is not to use pre-set processes but to influence people and build rewarding relationships; thus, it is considered a ‘two-way’ street. It focuses on what the program manager needs from stakeholders and what the program manager will offer to stakeholders that they will value. The map shows the benefits or expectations and the stakeholders’ expected contributions.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 96

136. a. Establish a balance between people who have negative views about the program and those who are advocates

After the stakeholder register has been prepared and the stakeholder concerns are better understood, it is up to the program manager to establish a balance to mitigate the effects of stakeholders who have negative views about the program and encourage the active support of stakeholders who see the program as a positive contribution.

PMI®, *The Standard for Program Management*, 2017, 62

137. d. Program D

The payback period can be determined by dividing the initial fixed investment in the program by the estimated annual net cash inflows. In this example, the payback period for Program D is 2.2 years, and it should be selected. Financial analysis, such as the payback period, are included in the program's business case.

PMI®, *The Standard for Program Management*, 2017, 35

Milosevic, Dragan. 2003. *Project Management ToolBox: Tools and Techniques for the Practicing Project Manager*, Hoboken, NJ: John Wiley & Sons 43–44

138. d. Have the component managers report procurement results to the program manager

In Program Contract Administration, administration and closeout of many contracts is handled by the components. The details of contract deliverables, requirements, deadlines, costs, and quality are handled at the component level.

PMI®, *The Standard for Program Management*, 2017, 131

139. a. Identifying the key risks and the likelihood of the impact they may occur

The purpose of the Program Initial Risk Assessment activity is to assess in program definition the identification of the key risks and their relative likelihood of occurring and impact to the program and also to determine the organization's risk appetite.

PMI®, *The Standard for Program Management*, 2017, 109

140. a. Use a sustaining activity to perform the upgrade

Delivered benefits must be sustained when the program is completed. It may be necessary to assure that ongoing product support adds value by managing the post-production life cycle. Another program or a sustaining activity is often used to deliver upgrades to the product during its life cycle as it will oversee the program's ongoing benefits.

PMI®, *The Standard for Program Management*, 2017, 55, 97

141. c. Motivate and mentor team members

Leading is a key personal competency for the program manager. It includes guiding, inspiring, and motivating team members and other stakeholders. It has an element that involves motivating and mentoring team members, which involves communicating to the team the program's vision, mission, and strategic value; rewarding performance following organizational guidelines; establishing mentoring relationships for team development; demonstrating ownership, accountability, and commitment to the program; and aligning personal activities and priorities to achieve the program's goals.

PMI®, *Project Manager Competency Development Framework*, 2017, 130, 134–135

142. c. Use an issue log

Stakeholder meetings serve two main purposes: communicating program status and hearing issues and concerns of the stakeholders. These issues and concerns then are captured in an issue log to document, prioritize, and track them to help understand the feedback that is provided.

PMI®, *The Standard for Program Management*, 2017, 65

143. c. Program C

In using net present value (NPV) as a selection criterion, the time value of money is considered based on the fact that a dollar one year from now is worth less than a dollar today. The more the future is discounted (that is, the higher the discount rate), then the less the NPV of the program. If the NPV is higher, then the program is rated higher. In this situation, you would select Program C.

Milosevic, Dragan. 2003. *Project Management ToolBox: Tools and Techniques for the Practicing Project Manager*. Hoboken, NJ: John Wiley & Sons, 43–44

PMI®, *The Standard for Program Management*, 2017, 35

144. a. Review the initial cost estimate in the business case

Although this estimate is a rough order of magnitude, it is useful to review it and also to see if there is any accompanying information about the costs that could not be identified.

PMI®, *The Standard for Program Management*, 2017, 107

145. c. Checklists

Checklists are contained in the program quality plan. Checklists can be very helpful in ensuring that items are not missed and also for use in quality assurance and quality control.

PMI®, *The Standard for Program Management*, 2017, 119

146. a. Request for Proposal

The Request for Proposal will take longer for potential contractors to prepare proposals and for the program team to evaluate them. However, this program is complex, and you want the best contractor support available. This approach enables specifying the potential contractors to show managerial and technical approaches and is not based on the lowest price.

PMI®, *The Standard for Program Management*, 2017, 131

147. d. Risk appetite

Benefits are an essential part of program deliverables, and increased benefits are the goal of program management. However, since benefits have risks associated with them, a risk structure for benefits is needed and is based on the overall organization's risk appetite or the amount and type of risks organizations may take to realize strategic goals.

PMI®, *The Standard for Program Management*, 2017, 45

148. c. Activities and systems needed for changes

The benefits management plan covers many items. One is the associated activities, processes, and systems that are required because of the changes that occur from realizing benefits. It includes the required changes to processes and systems and how and when the transition to operations will occur.

PMI®, *The Standard for Program Management*, 2017, 50

149. c. Analytical

The program manager should have analytical skills to assess outputs and outcomes of the program's components to ensure they will contribute as expected to benefit delivery or to assess the potential impact of any external events on the program's strategy or plans.

PMI®, *The Standard for Program Management*, 2017, 18

150. b. Develop a qualified seller list

The program manager negotiates and finalizes program-wide policies and agreements. The key objective at the program level is to set standards for the components; standards may be in terms of qualified seller lists. They can facilitate the procurement process, as procurement documents can be sent to these prospective sellers to gauge interest and to see whether they want to present a proposal or quotation.

PMI®, *The Standard for Program Management*, 2017, 131

151. b. Focus on milestones in the components' schedules

The program manager focuses on milestones of the key deliverables rather than monitoring each activity in the component' schedule.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 223

152. d. Use a facilitative leadership style

Since some of the powerful stakeholders are threatened by the program and no one likes change, the best approach is to avoid an authoritarian approach and instead follow a facilitating approach with an open atmosphere that shows respect for all stakeholders. It is also important to understand the culture, speak their language, and be familiar with organizational politics.

Thiry, Michel. *Program Management*, 2015. Surrey, England: Gower Publishing Limited, 32, 65

153. d. Providing input from customers and organizational stakeholders

Other examples are program status reports and benefit realization reports. Stakeholders can include internal audit, quality control, and documented program governance meetings.

PMI®, *Project Manager Competency Development Framework*, 2017, 116

154. c. Ensure the program is managed appropriately

The framework provides practices for effective decision making and ensures the program is managed appropriately.

PMI®, *The Standard for Program Management*, 2017, 67

155. a. Show "what-if" analysis

Comparative advantage analysis is used to assess the validity for a strategic initiative and/or the business case. It is used to consider any competing efforts internal or external to the program. Since the business case includes analysis and comparison against real or hypothetical efforts, it is useful to consider "what-if" analysis to show how the program's objectives and intended benefits may be achieved by other means.

PMI®, *The Standard for Program Management*, 2017, 39

156. c. Escalated risks

The plan specifies how to handle risks and issues. Some risks and issues are resolved by the program manager, but an example of a boundary is when the program manager needs to escalate these risks or issues to the program steering committee recognizing they have implications for other work in the organization.

PMI®, *The Standard for Program Management*, 2017, 70, 73

157. b. Two SMEs dislike each other so much they are not going to participate

People often have resist direct management as in this situation, which is a cross-functional team, when the relationship is one that does not have affiliation with their hierarchical group.

PMI®, *The Standard for Program Management*, 2017, 57

158. b. Review your procurement management assessment

The program procurement management assessment is important for many reasons especially when the program is using a public-private partnership or involves work in other countries; both are involved in this situation. These cases present unique procurement challenges, and the program delivery phase is where most of the contracting work will be done. This assessment then is a valuable input to the procurement management plan.

PMI®, *The Standard for Program Management*, 2017, 108

159. b. Program B

Programs should align with the organization's strategic goals. The program manager then needs to know how the program will fulfill the portfolio and organizational strategy, goals, and objectives. In this example, Program B fully supports four of the five goals.

PMI®, *The Standard for Program Management*, 2017, 33

160. b. Document proposal evaluation criteria

At the program level, in Program Procurement Management, standard proposal evaluation criteria are required such that every person who is evaluating a proposal for one of these contracts uses the same criteria to avoid bias and promote objectivity.

PMI®, *The Standard for Program Management*, 2017, 131

161. b. Endorse or approve recommendations regarding your program

The program manager works closely with the program steering committee, but the program manager's responsibilities are to make sure the program is run through the governance framework and manage the day-to-day program activities. He or she uses the committee as a review and decision-making group that endorses or approves recommendations regarding the program.

PMI®, *The Standard for Program Management*, 2017, 81

162. a. Establish alignment with strategic goals

Programs are evaluated, selected, and authorized because of their alignment and support to achieve the organization's strategic goals. The program is linked to the organization's strategic plan to help the organization achieve its strategic goals and objectives and to balance resource use while maximizing value, as documented in the business case.

PMI®, *The Standard for Program Management*, 2017, 35

163. a. PWBS

In Program Procurement Planning, techniques such as make-or-buy decisions and the PWBS aid the program manager in developing the procurement management plan, determining procurement standards, and determining whether updates are needed to the program's financial plan or to the budget.

PMI®, *The Standard for Program Management*, 2017, 117

164. d. Review the benefits management plan

The benefits management plan, among other items, should ensure the program delivers its expected benefits. The actual benefits delivered should be regularly evaluated against the expected benefits in the plan by Governance of the planned versus actual benefits including KPIs.

PMI®, *The Standard for Program Management*, 2017, 52

165. a. Conduct a comparative advantage analysis

A comparative advantage analysis is especially important in this situation where time to market is critical. It is necessary to ensure there are no competing efforts that reside outside of the organization. If there are competing efforts, they need to be included in the business case to determine whether to pursue the program.

PMI®, *The Standard for Program Management*, 2017, 39

166. a. Address commonalities and differences across components

Early and intensive planning is critical to success in program procurement planning. The program manager looks across all components to develop the procurement management plan to meet objectives and for benefit delivery. By addressing commonalities and differences across components, then the best type of procurement approaches for the program can be determined.

PMI®, *The Standard for Program Management*, 2017, 117

167. c. Making information available through the information repository

Making information available that is of high quality and facilitating its ease of access through an information repository can enable these new team members to learn approaches used and past decisions on previous programs. It also can support communications.

PMI®, *The Standard for Program Management*, 2017, 130

168. c. Quality

Changes on programs should be managed in accordance with the change management plan as Program Quality Control involves monitoring components and deliverables to determine if they meet the quality requirements and lead to benefit realization. An output from Program Quality Control is quality change requests.

PMI®, *The Standard for Program Management*, 2017, 132

169. b. Link the program to the company's strategic goals and objectives

Programs are evaluated, selected, and authorized based on their alignment and support to achieve the organization's strategic plan. The goal of linking the program to the strategic plan is to help the organization achieve the strategic goals and objectives, which is done through the business case.

PMI®, *The Standard for Program Management*, 2017, 35

170. c. Portfolio governance

Typically, portfolio governance is at the hierarchical level of governance where program investments are made.

PMI®. *The Standard for Program Management*, 2017, 67

Appendix: Study Matrix



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Study Matrix—Practice Test 1

<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
1	Program Strategy Alignment	
2	Executing/Program Delivery	
3	Program Stakeholder Engagement	
4	Initiating/Program Formulation	
5	Program Governance	
6	Program Strategy Alignment	
7	Program Benefits Management	
8	Program Benefits Management	
9	Planning/Program Planning	
10	Program Stakeholder Engagement	
11	Program Strategy Alignment	
12	Controlling/Program Performance Monitoring and Controlling	
13	Planning/Program Planning	
14	Planning/Program Planning	
15	Executing/Program Delivery	
16	Program Benefits Management	
17	Program Governance	
18	Program Strategy Alignment	
19	Initiating/Program Formulation	
20	Executing/Program Delivery	
21	Planning/Program Planning	
22	Planning/Program Planning	
23	Controlling/Program Performance Monitoring and Controlling	
24	Executing/Program Delivery	
25	Program Stakeholder Engagement	
26	Program Strategy Alignment	
27	Program Benefits Management	
28	Initiating/Program Formulation	

Continued

<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
29	Executing/Program Delivery	
30	Controlling/Program Performance Monitoring and Controlling	
31	Closing/Program Closeout	
32	Executing/Program Delivery	
33	Controlling/Program Performance Monitoring and Controlling	
34	Program Strategy Alignment	
35	Program Strategy Alignment	
36	Program Stakeholder Engagement	
37	Program Stakeholder Engagement	
38	Executing/Program Delivery	
39	Program Governance	
40	Program Benefits Management	
41	Controlling/Program Performance Monitoring and Controlling	
42	Program Stakeholder Engagement	
43	Program Strategy Alignment	
44	Program Governance	
45	Executing/Program Delivery	
46	Closing/Program Closeout	
47	Planning/Program Planning	
48	Program Stakeholder Engagement	
49	Program Strategy Alignment	
50	Planning/Program Planning	
51	Program Benefits Management	
52	Program Stakeholder Engagement	
53	Controlling/Program Performance Monitoring and Controlling	
54	Initiating/Program Formulation	
55	Program Strategy Alignment	
56	Planning/Program Planning	

Continued

<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
57	Program Stakeholder Engagement	
58	Program Stakeholder Engagement	
59	Program Governance	
60	Executing/Program Delivery	
61	Program Benefits Management	
62	Program Strategy Alignment	
63	Executing/Program Delivery	
64	Program Stakeholder Engagement	
65	Initiating/Program Formulation	
66	Program Governance	
67	Program Benefits Management	
68	Program Strategy Alignment	
69	Executing/Program Delivery	
70	Program Stakeholder Engagement	
71	Program Governance	
72	Initiating/Program Formulation	
73	Closing/Program Closeout	
74	Program Governance	
75	Executing/Program Delivery	
76	Program Stakeholder Engagement	
77	Controlling/Program Performance Monitoring and Controlling	
78	Program Stakeholder Engagement	
79	Program Governance	
80	Program Strategy Alignment	
81	Controlling/Program Performance Monitoring and Controlling	
82	Program Benefits Management	
83	Executing/Program Delivery	
84	Program Governance	
85	Planning/Program Planning	

Continued

<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
86	Program Stakeholder Engagement	
87	Program Governance	
88	Program Strategy Alignment	
89	Planning/Program Planning	
90	Executing/Program Delivery	
91	Program Governance	
92	Controlling/Program Performance Monitoring and Controlling	
93	Program Governance	
94	Program Strategy Alignment	
95	Planning/Program Planning	
96	Program Stakeholder Engagement	
97	Executing/Program Delivery	
98	Controlling/Program Performance Monitoring and Controlling	
99	Program Strategy Alignment	
100	Initiating/Program Formulation	
101	Planning/Program Planning	
102	Program Benefits Management	
103	Controlling/Program Performance Monitoring and Controlling	
104	Program Stakeholder Engagement	
105	Planning/Program Planning	
106	Controlling/Program Performance Monitoring and Controlling	
107	Program Strategy Alignment	
108	Executing/Program Delivery	
109	Closing/Program Closeout	
110	Program Benefits Management	
111	Initiating/Program Formulation	
112	Executing/Program Delivery	

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<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
113	Controlling/Program Performance Monitoring and Controlling	
114	Controlling/Program Performance Monitoring and Controlling	
115	Program Strategy Alignment	
116	Planning/Program Planning	
117	Program Benefits Management	
118	Program Benefits Management	
119	Executing/Program Delivery	
120	Executing/Program Delivery	
121	Program Governance	
122	Program Strategy Alignment	
123	Program Benefits Management	
124	Program Benefits Management	
125	Planning/Program Planning	
126	Program Governance	
127	Executing/Program Delivery	
128	Executing/Program Delivery	
129	Program Stakeholder Engagement	
130	Program Stakeholder Engagement	
131	Program Strategy Alignment	
132	Program Governance	
133	Program Stakeholder Engagement	
134	Controlling/Program Performance Monitoring and Controlling	
135	Program Governance	
136	Initiating/Program Formulation	
137	Planning/Program Planning	
138	Executing/Program Delivery	
139	Program Governance	
140	Program Stakeholder Engagement	
141	Program Governance	

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<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
142	Program Strategy Alignment	
143	Executing/Program Delivery	
144	Program Benefits Management	
145	Planning/Program Planning	
146	Program Stakeholder Engagement	
147	Planning/Program Planning	
148	Controlling/ Program Performance Monitoring and Controlling	
149	Program Governance	
150	Program Stakeholder Engagement	
151	Program Strategy Alignment	
152	Program Governance	
153	Program Benefits Management	
154	Program Governance	
155	Program Stakeholder Engagement	
156	Program Strategy Alignment	
157	Closing/Program Closeout	
158	Program Stakeholder Engagement	
159	Program Governance	
160	Program Benefits Management	
161	Program Strategy Alignment	
162	Initiating/Program Formulation	
163	Planning/Program Planning	
164	Executing/Program Delivery	
165	Controlling/Program Performance Monitoring and Controlling	
166	Program Stakeholder Engagement	
167	Program Strategy Alignment	
168	Program Governance	
169	Program Stakeholder Engagement	
170	Program Benefits Management	

Study Matrix—Practice Test 2

<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
1	Program Benefits Management	
2	Program Strategy Alignment	
3	Executing/Program Delivery	
4	Initiating/Program Formulation	
5	Executing/Program Delivery	
6	Controlling/Program Performance Monitoring and Controlling	
7	Program Strategy Alignment	
8	Planning/Program Planning	
9	Closing/Program Closeout	
10	Executing/Program Delivery	
11	Program Stakeholder Engagement	
12	Program Benefits Management	
13	Controlling/Program Performance Monitoring and Controlling	
14	Program Governance	
15	Initiating/Program Formulation	
16	Program Strategy Alignment	
17	Executing/Program Delivery	
18	Program Governance	
19	Planning/Program Planning	
20	Controlling/Program Performance Monitoring and Controlling	
21	Program Governance	
22	Program Benefits Management	
23	Program Strategy Alignment	
24	Program Strategy Alignment	
25	Executing/Program Delivery	
26	Program Governance	
27	Planning/Program Planning	

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<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
28	Controlling/Program Performance Monitoring and Controlling	
29	Closing/Program Closeout	
30	Initiating/Program Formulation	
31	Planning/Program Planning	
32	Program Benefits Management	
33	Program Strategy Alignment	
34	Executing/Program Delivery	
35	Program Stakeholder Engagement	
36	Controlling/Program Performance Monitoring and Controlling	
37	Program Governance	
38	Planning/Program Planning	
39	Planning/Program Planning	
40	Controlling/Program Performance Monitoring and Controlling	
41	Program Strategy Alignment	
42	Initiating/Program Formulation	
43	Executing/Program Delivery	
44	Program Benefits Management	
45	Program Stakeholder Engagement	
46	Program Stakeholder Engagement	
47	Executing/Program Delivery	
48	Program Strategy Alignment	
49	Program Benefits Management	
50	Program Stakeholder Engagement	
51	Program Governance	
52	Controlling/Program Performance Monitoring and Controlling	
53	Program Benefits Management	
54	Program Benefits Management	
55	Program Strategy Alignment	

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<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
56	Program Governance	
57	Program Stakeholder Engagement	
58	Program Benefits Management	
59	Program Stakeholder Engagement	
60	Planning/Program Planning	
61	Executing/Program Delivery	
62	Controlling/Program Performance Monitoring and Controlling	
63	Program Stakeholder Engagement	
64	Program Stakeholder Engagement	
65	Program Benefits Management	
66	Program Governance	
67	Program Stakeholder Engagement	
68	Initiating/Program Formulation	
69	Program Strategy Alignment	
70	Program Benefits Management	
71	Program Benefits Management	
72	Planning/Program Planning	
73	Controlling/Program Performance Monitoring and Controlling	
74	Executing/Program Delivery	
75	Executing/Program Delivery	
76	Executing/Program Delivery	
77	Program Stakeholder Engagement	
78	Program Strategy Alignment	
79	Program Stakeholder Engagement	
80	Program Governance	
81	Program Stakeholder Engagement	
82	Program Stakeholder Engagement	
83	Executing/Program Delivery	
84	Controlling/Program Performance Monitoring and Controlling	

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<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
85	Program Governance	
86	Program Stakeholder Engagement	
87	Program Strategy Alignment	
88	Initiating/Program Formulation	
89	Program Governance	
90	Program Stakeholder Engagement	
91	Planning/Program Planning	
92	Controlling/Program Performance Monitoring and Controlling	
93	Program Stakeholder Engagement	
94	Program Stakeholder Engagement	
95	Program Stakeholder Engagement	
96	Program Governance	
97	Program Benefits Management	
98	Program Strategy Alignment	
99	Executing/Program Delivery	
100	Program Governance	
101	Initiating/Program Formulation	
102	Initiating/Program Formulation	
103	Planning/Program Planning	
104	Program Governance	
105	Program Strategy Alignment	
106	Executing/Program Delivery	
107	Program Governance	
108	Closing/Program Closeout	
109	Program Benefits Management	
110	Program Stakeholder Engagement	
111	Program Stakeholder Engagement	
112	Program Governance	
113	Program Stakeholder Engagement	
114	Program Strategy Alignment	

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<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
115	Planning/Program Planning	
116	Planning/Program Planning	
117	Executing/Program Delivery	
118	Executing/Program Delivery	
119	Controlling/Program Performance Monitoring and Controlling	
120	Closing/Program Closeout	
121	Program Strategy Alignment	
122	Program Governance	
123	Executing/Program Delivery	
124	Controlling/Program Performance Monitoring and Controlling	
125	Initiating/Program Formulation	
126	Planning/Program Planning	
127	Program Benefits Management	
128	Program Benefits Management	
129	Program Governance	
130	Program Strategy Alignment	
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133	Executing/Program Delivery	
134	Controlling/Program Performance Monitoring and Controlling	
135	Program Stakeholder Engagement	
136	Program Stakeholder Engagement	
137	Program Strategy Alignment	
138	Controlling/Program Performance Monitoring and Controlling	
139	Initiating/Program Formulation	
140	Closing/Program Closeout	
141	Executing/Program Delivery	
142	Program Stakeholder Engagement	

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<i>Practice Test Question Number</i>	<i>Performance Domain</i>	<i>Study Notes</i>
143	Program Strategy Alignment	
144	Planning/Program Planning	
145	Planning/Program Planning	
146	Executing/Program Delivery	
147	Program Benefits Management	
148	Program Benefits Management	
149	Program Strategy Alignment	
150	Executing/Program Delivery	
151	Controlling/Program Performance Monitoring and Controlling	
152	Program Stakeholder Engagement	
153	Program Governance	
154	Program Governance	
155	Program Strategy Alignment	
156	Program Governance	
157	Program Stakeholder Engagement	
158	Planning/Program Planning	
159	Program Strategy Alignment	
160	Executing/Program Delivery	
161	Program Governance	
162	Program Strategy Alignment	
163	Planning/Program Planning	
164	Program Benefits Management	
165	Program Strategy Alignment	
166	Planning/Program Planning	
167	Executing/Program Delivery	
168	Controlling/Program Performance Monitoring and Controlling	
169	Program Strategy Alignment	
170	Program Governance	

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