- 1. Project scope defines:
 - a) A project manager's visibility to the end date
 - b) The magnitude or size of the job.
 - c) How often a project has been changed.
 - d) The limits of a project manager's authority.1 point
- 2. Which of the following is not an objective of a project?
 - a) Scope
 - b) time
 - c) Cost
 - d) Accurate
- 3. What is a stakeholder?
 - a) The person responsible for preparing the project budget.
 - b) An organization that is hire to perform risk analysis.
 - c) A person or organization that is not actively involved in the project, or whose interests will not be affected by execution or completion of the project.
 - d) A person or organization that is actively involved in the project, or whose interests may be positively or negatively affected by execution or completion of the project.
- 4. Which is not a broad phase of Project Life Cycle?
 - a) Initiation
 - b) Implementation
 - c) Staffing phase
 - d) Finishing phase
- 5. Find the odd one with respect to TOPSIS?
 - a) Qualitative benefit attributes/criteria
 - b) Quantitative benefit attributes
 - c) Time attributes
 - d) Cost attributes or criteria

1. Which of the following is not project management goal

- a. Keeping overall costs within budget
- b. Delivering the software to the customer at the agreed time
- c. Maintaining a happy and well-functioning development team
- d. Avoiding customer complaints
- 2. Which of the following does not constitute the role of a project manager?
- a. Integrator and coordinator
- b. Business case approval
- c. Project delivery
- d. Project planning and controlling
- 3. Effective communication is one of the most important skills required by
- a. The project team
- b. The management
- c. The project Manager
- d. The project Contractor
- 4. Which of the following is not an objective of a project?
- a. Scope
- b. time
- c. Cost
- d. Accurate
- 5. What does 'R' represent in a SMART project?
- a. Risk
- b. Relevant
- c. Realistic
- d. Resource
- 6. What does term 'KSTT' stands for with respect to project management?
- a. Knowledge, Skills, Tools and Technology

b. Knowledge, Skills, Techniques and Technology c. Knowledge, Skills, Tools and Techniques d. Knowledge, Skills, Tools and Time 7. Which of the following is not a Project Management Maturity Model? a) SEI's (Software Engineering Institute) b) Center for Business Practices c) ETI (Education Technical Institute) d) Kerzner's model 8. What does 'PMMM' stands for? a. Project Management Measurement Model b. Project Management Maturity Model c. Project Management Mixed Model d. Project Management Mass Model is an organizational unit to centralize structure with specific mandated that can include an enterprise-wide perspective? a. Project Management b. Project Management Office c. Functional department d. None of the above 10. What are the determinants of project success as per Iron Triangle? a. Resources, Cost, Performance b. Knowledge, Time, Resources c. Cost, Skills, Performance

d. Cost, Performance, Time

- 1. Which of the following is not a classification of Brownfield projects?
- a) Expansion
- b) Diversification
- c) Modernization
- d) Vertical Integration
- 2. Project Life Cycle generally does not define which of the following?
- a) Technical work
- b) Deliverables
- c) Control and approval
- d) Training
- 3. Which of the following is the longest phase of a Project life cycle in terms of time?
- a) Concept phase
- b) Implementation phase
- c) Planning phase
- d) Termination phase
- 4. What is the correct sequence of Project Life Cycle phases?
- a) Initiation, Implementation, Planning and Project Clean-up
- b) Initiation, Project Clean-up, Planning and Implementation
- c) Initiation, Project Clean-up, Implementation and Planning
- d) Initiation, Planning, Implementation and Project Clean-up
- 5. Arrange the following elements of the Project Cycle in the right order:
- A- Project Appraisal
- B- Feasibility Analysis
- C- Negotiation
- **D- Project Selection**
- a) A-B-C-D
- b) B-A-C-D
- c) B-A-D-C
- d) A-B-D-C
- 6. Select the correct statement.
- a) Stakeholder identification should be completed prior to constructing the project charter.
- b) Stakeholder identification should be performed at the beginning of each project phase.
- c) Where a project begins pursuant to a contract, stakeholder identification is not necessary.
- d) Stakeholder identification is a continuous process that should be performed throughout the entire project life cycle.

7. BCG Matrix is used for?
a) Project appraisal
b) Project selection
c) Project controlling
d) Project budgeting
8. Project identification is generally done through?
a <mark>) Brainstorming</mark>
b) Questionnaire
Fundamental analysis
d) Technical analysis
9. New ventures by fresh entrepreneurs/promotors are?
a) Greenfield projects
b) Brownfield projects
c) Conglomerate projects
d) Concentric projects
10. Which of the following is not correct about initial phase of a project?

- a. The cost associated at the beginning of the project is highest
- b. Stakeholders have maximum influence during this phase
- c. The highest uncertainty is at this stage of the project d. All the above statements are correct

 1. Which one of the following is not an MCDM technique? a) AHP b) SMART c) PERT d) TOPSIS
 2. In order to get a "feel" of the relationship between the product and its market, the project analyst may informally talk to customers, competitors, middlemen, and others in the industry. This is a analysis? a) Demand Analysis b) Situational Analysis c) Customer Analysis d) Product Analysis
 3. In TOPSIS, how are the alternatives ranked? a) Based on their proximity to the ideal solution and their distance from the negative ideal solution b) Based on their random assignment of ranks c) Based on their alphabetical order
d) Based on their initial order in the dataset 4. How normalized score is calculated in TOPSIS method? a) $R_{ij} = x_{ij}/(\Sigma x_{ij}^2)$ b) $R_{ij} = x_{ij}/(\Sigma x_{ij}^3)$ c) $R_{ij} = x_{ij}/(\Sigma x_{ij}^3)$ d) $R_{ij} = x_{ij}/(\Sigma x_{ij}^4)$
 5. Which of the following is not a quantitative forecasting method? a) Trend projection b) Exponential smoothing c) Delphi d) Moving average
6. Which of the following is not related to Information sought in market survey?a) Total demandb) Price elasticitiesc) Purchasing plansd) Production schedule
7. Which of the following is not a key step in Market and Demand Analysis?

a) Situational analysisb) Market surveyc) Resource planning

- d) Characterization of the market
- 8. Which of the following is not a Causal method?
- a) Chain ratio method
- b) Jury execution method
- c) End use method
- d) Econometric method
- 9. Which of the following is not a step in a sample survey?
- a) Selecting sample size
- b) Developing questionnaire
- c) Resource planning
- d) Scrutinizing
- 10. Which of the following is a limitation of TOPSIS?
- a) It can only handle binary decision problems
- b) It assumes all criteria are equally important
- c) It requires a large amount of computational resources
- d) It is not suitable for multi-objective optimization

 Which of the following is not a discounted capital budgeting technique? a) Discounted PBP b) Profitability index c) ARR d) NPV
2. Internal Rate of return (IRR) is the discounting rate in which Net Present value (NPV) is equal to a) 0 b) 1 c) 2 d) 3
 3. Which of the following statement is false about ARR method? a) It takes into account accounting profits b) It considers time value of money c) Cut off rate is chosen by management d) The concept of average investment and average earnings differ widely
 4. Mr X wants to receive 120,000 every year for next 10 years (starting from next year from now). How much money should he deposit now? The interest rate is 10%. a) 637400 b) 737400 c) 837400 d) 937400
5. Calculate the net present value of a project which requires an initial investment of \$243,000 and it is expected to generate a cash inflow of \$50,000 each month for 12 months. Assume that the salvage value of the project is zero. The target rate of return is 12% per annum. a) \$ 391754 b) \$ 301000 c) \$ 197543 d) \$ 319754
Solution: We have, Initial Investment = \$243,000, Net Cash Inflow per Period = \$50,000 Number of Periods = 12, Discount Rate per Period = $12\% \div 12 = 1\%$ Net Present Value = $$50,000 \times (1 - (1 + 1\%)^{-12}) \div 1\% - $243,000$ = $$50,000 \times (1 - 1.01^{-12}) \div 0.01 - $243,000$ = $$50,000 \times (1 - 0.887449) \div 0.01 - $243,000$ = $$50,000 \times 0.112551 \div 0.01 - $243,000$

 $= \$50,000 \times 11.2551 - \$243,000 \approx \$562,754 - \$243,000 = \$319,754$

- 6. The first public offering of equity shares of a company, which is followed by a listing of its shares on the stock market is called?
- a) IPO
- b) BPO
- c) IOP
- d) EPO
- 7. Which of the following is not a survey evaluation technique?
- a) Internal rate of return
- b) Payback period
- c) Mean absolute deviation
- d) Profitability index
- 8. Which of the following is not a key factor for determining the debt-equity ratio for a project?
- a) Cost
- b) Nature of assets
- c) Business risk
- d) Price elasticity
- 9. Who are the owners of a company?
- a) Creditors
- b) Equity Shareholders
- c) Managers
- d) Debenture holders
- 10. Which of the following is not true about Net present Value (NPV)?
- a) It considers all cash flows
- b) It considers time value of money
- c) It considers risk factors
- d) It allows expected changes in cost of capital

 Which of the following is not a measure of risk? Range Standard deviation Coefficient of variation Mean
 2. PRAM Stands for? a) Project Risk Aversion and Management b) Project Analysis and Management c) Project Risk Analysis and Management d) Project Risk Allocation and Management
3. John Strauss is a Project Manager for a reforestation project. To identify the risks involved John sends a questionnaire to gather inputs from experts. Which technique is John using? a) Delphi technique b) Interviews c) Brain storming d) Documentation review
 4. Which of the following is correct sequence for phases of risk assessment? a) Define, Identify, Focus, Estimate b) Define, Estimate, Evaluate, Focus c) Define, Focus, Identify, Structure d) Define, Identify, Focus, Manage
 5. Which of the following is not a source of a risk? a) Financial risk b) Project specific risk c) Competitive risk d) Market risk
 6. Accounting Break Even Analysis is equal to a) A.B.E = (Fixed cost – Depreciation)/Contribution margin ratio b) A.B.E = (Depreciation – Fixed cost)/Contribution margin ratio c) A.B.E = (Contribution margin ration + Fixed cost)/Depreciation d) A.B.E = (Fixed costs + Depreciation)/Contribution margin ratio

7. Which of the following is not a technique for stand-alone risk analysis?
a) Sensitivity analysis

b) Market analysis

- c) Scenario analysis
- d) Simulation analysis
- 8. What is the correct sequence of steps in Simulation analysis?
- a) Model the project, Select a value, Specify the value, Determine the value of NPV
- b) Model the project, Select a value, Determine the value of NPV, Specify the value
- c) Model the project, Determine the value of NPV, Select a value, Specify the value
- d) Model the project, Specify the value, Select a value, Determine the value of NPV
- 9. Project Risk = ____* Consequences of Event.
- a) Loss

c) 232.5d) 267.9

- b) Outcomes of Event
- c) Probability of Event
- d) None of the above
- 10. Calculate standard deviation for the given data:

NPV	Probability
200	0.3
600	0.5
900	0.2
a) 240.3	
b) 249.8	

1. The requirement of machinery and equipment is dependent on
a) Cost
b) Technology and plant capacity
c) Customer requirement
d) Competition
2. Which of the following is not a reason for project abandonment?
a) Higher profits
b) Selling price and quantity
c) Raw material price
d) Higher expected rate of return
3. Which of the following is not a type of project chart and plant layout?
a) General functional layout
b) Multipurpose layout
c) Production line diagram
d) Organizational layout
A A way and the full arrive story of Desiries two Assolution
4. Arrange the following steps of Decision tree Analysis?A. Delineating the decision
B. Identifying the problem and alternatives- Imaginative efforts –risk and uncertainty C. Evaluating various decision alternatives
D. Specifying probabilities and monetary outcomes
a) B-C-D-A
b) B-A-D-C
c) B-A-C-D
d) A-B-C-D
E. Dooksoning materials some under which of the following estagonics?
5. Packaging materials come under which of the following categories?a) Raw materials
b) Processed industrial materials
c) Auxiliary materials
d) Utilities
a, canaco
6. Plant capacity generally measured in terms of
a) Area of the plant
b) Number of units manufactured during a given period c) Number of workers
d) Investment in machinery

 7. Which one of the following is a tool for analyzing situations where sequential decision making in face of risk is involved. a) Simulation Analysis b) Decision tree Analysis c) Scenario Analysis d) Hiller Model
8. For 4000 units, the investment is Rs 100000. What would be the investment for 12000 units.
Given alpha is 0.7.
a) 235864
b) 214653
c) 215767
d) 215867
9. Decision points are also called as
a) Decision nodes
b) Decision networks
c) Decision forks
d) None of the above
 10. The choice of location is influenced by factors except? a) Proximity to raw materials and markets b) Labor situation c) Availability of infrastructure d) Budget

 Matrix organization having two bosses can give rise to which of the following conflict? a) Goal-oriented b) Administrative c) Normative d) Interpersonal
2. Which of the following is not a project scheduling and controlling technique?a) Bar chartb) Life cycle curvesc) Network techniques (PERT/CPM)d) House of quality
 3. Defusion is also known as which of the following types of conflict resolution? a) Mediate b) Arbitrate c) Control d) Eliminate
 4. Which of the following is not a category of conflict? a) Goal-oriented b) Administrative c) Normative d) Interpersonal
5. Degree of mutual attraction that team members hold for each other and their task is known as? a) Cohesiveness b) Orientation c) Trust d) Forming
6. An activity can be represented by a) Only one arrow b) Two arrows c) Three arrows d) Any number of arrows
 7. Which of the following is not true about Critical Path Method (CPM)? a) It is a probabilistic technique b) The duration of project is fixed c) Looping events are not allowed in network d) None of the above
8. What is the correct sequence of stages in group development? a) Forming, Norming, Performing, Storming

- b) Forming, Norming, Storming, Performing
- c) Forming, Storming, Norming, Performing
- d) Forming, Performing, Norming, Storming
- 9. The process of identifying and documenting relationships among project activities is known as
- a) Schedule management
- b) Defining activities
- c) Sequencing activities
- d) Estimating activity resources
- 10. Which of the following is not true about Project Evaluation Review Technique (PERT)?
- a) It is a probabilistic technique
- b) The duration of project is fixed
- c) Simulation can be allowed in network
- d) None of the above

1. The optimistic time is the a) Shortest possible time b) Maximum possible time c) Intermediate time d) Most likely time
 2. In PERT, the distribution of activity times is assumed to be: a) Normal b) Beta c) Gamma d) Exponential
 3. Which of the following is not a time estimate used in PERT? a) Optimistic time b) Moderate time c) Pessimistic time d) Most likely time
 4. Latest allowable occurrence time is calculated using a) Upward pass b) Forward pass c) Backward pass d) Downward pass
 5. In research and development projects which time estimate is used? a) Single time estimate b) Multiple time estimate c) Both of the above d) None of the above
6. A project consists of three parallel paths with durations and variances of (10, 4), (12, 4) and (12, 9) respectively. According to the standard PERT assumptions, the distribution of the project duration is: a) Normal with mean 10 and standard deviation 3 b) Normal with mean 12 and standard deviation 3 c) Beta with mean 10 and standard deviation 2 d) Beta with mean 12 and standard deviation 2
7. A critical path is a path where, slack is a) Positive b) Negative c) Zero d) One
8. Which one of the following statements is not correct? a) PERT is activity oriented and CPM is event oriented

- b) In PERT, three-time estimates are made, whereas in CPM only one time estimate is made
- c) In PERT slack is calculated whereas in CPM floats are calculated
- d) Both PERT and CPM are used for project situations
- 9. The critical path of a network is the path that:
- a) Takes the shortest time
- b) Takes the longest time
- c) Has the minimum variance
- d) Has the maximum variance
- 10. The expected time (Te) of a PERT activity is given by:
- a) Te = (To 4Tm + Tp)/6
- b) Te = (To 4Tm Tp)/6
- c) Te = (To + 4Tm + Tp)/6
- d) Te = (To + 4Tm + Tp)/3

- 1. Which of the following floats can have negative value?
- a) Total float
- b) Free float
- c) Continuous float
- d) Independent float
- 2. What is the correct sequence for floats?
- a) Independent float < Total float < Free float
- b) Total Float <= Free Float <= Independent Float
- c) Independent Float <= Free Float <= Total Float
- d) Free Float < Total Float < Independent Float
- 3. A dummy activity is used in PERT network to:
- a) Facilitate computation of slacks
- b) Satisfy precedence requirements
- c) Determine project completion time
- d) Avoid use of resources
- 4. What is the additional time available for the performance of an activity in PERT and CPM calculated on the basis that all activities will start at their earliest start time, called?
- a) Slack
- b) Total float
- c) Free float
- d) Independent float
- 5. If the earliest starting time for an activity is 8 weeks, the latest finish time is 37 weeks and the duration time of the activity is 11 weeks, then the total float is equal to:
- a) 18 weeks
- b) 14 weeks
- c) 56 weeks
- d) 40 weeks

Solution: T.F. = LS - ES - t = 37 - 8 - 11 = 18

- 6. Latest start time of an activity in Critical Path Method is the
- a) Latest occurrence time of the successor event minus the duration of the activity
- b) Earliest occurrence time for the predecessor event plus the duration of the activity
- c) Latest occurrence time of the successor event
- d) Earliest occurrence time for the predecessor event
- 7. Fulkerson's rule is connected with
- a) Numbering of event in PERT/CPM
- b) The simulating model

c) Queuing theory
d) None of the above
8. Slack is the delay possible for an event without affecting its overall duration. a) Minimum b) Maximum
c) Total
d) Zero
9. Free float is defined as a) Tej + tij + Tei b) Tej - Tei - tij c) Tej + Tei - tij d) None of the above
 10. Earliest finish time can be regarded as a) EST + duration of activity b) EST - duration of activity c) LFT + duration of activity d) LFT - duration of activity

- 1. The particular task performance in CPM is known
 - a) Dummy
 - b) Event
 - c) Activity
 - d) Contract
- 2. In Project Evaluation and Review Technique (PERT) and Critical Path Method (CPM), what is the relationship between time and cost?
 - a) Time and cost have a direct relationship
 - b) Time and cost have an inverse relationship
 - c) Time and cost are independent of each other
 - d) The relationship between time and cost varies based on project characteristic
- 3. In CPM network critical path denotes the
 - a) Path where maximum resources are used
 - b) Path where minimum resources are used
 - c) Path where delay of one activity prolongs the duration of completion of project
 - d) Path that gets monitored automatically
- 4. Which of the following statements accurately describes the time-cost relationship in PERT/CPM?
 - a) Increasing the project duration will always result in increased costs
 - b) Decreasing the project duration will always result in decreased costs
 - c) Increasing or decreasing the project duration has no effect on costs
 - d) The time-cost relationship varies depending on specific project circumstances
- 5. Network of a project is constructed based on
 - a) Critical path
 - b) Normal time and Crash Time
 - c) Precedence Logic
 - d) Basic Logic
- 6. For an activity in a CPM analysis, the early Finish time is 13 and the late Finish time is 13. Duration of activity is 6. Which of the following statements is true?
 - a) The early start is 6
 - b) The duration of the activity is 13
 - c) The slack of this activity is 13
 - d) The activity is on the critical path
- 7. In the time-cost optimization, using CPM method for network analysis, the crashing of the activities along the critical path is done starting with the activity having
 - a) Longest duration
 - b) Highest cost slope
 - c) Least cost slope

d) Shortest duration	
8. Crashing of a project is the process of reducing the	of the
project?	
a) Cost	

- b) Time
- o) Time
- c) Material
- d) Labor
- 9. In Project crashing, rent and overheads are treated as
 - a) Significant Cost
 - b) Insignificant costs
 - c) Direct Costs
 - d) Indirect Costs
- 10. Assertion (A): The change in critical path required rescheduling in a PERT network. Reason (R): Some of the activities cannot be completed in time due to unexpected breakdown of equipment's or non-availability of raw materials.
 - a) Both A and R are individually true and R is the correct explanation of A
 - b) Both A and R are individually true but R is not the correct explanation of A
 - c) A is true but R is false
 - d) A is false but R is true

- 1. Cost performance index is calculated by using:
 - a) Actual cost / Planned value
 - b) Planned value / Earned value
 - c) Budget cost at completion / Actual cost
 - d) Earned value / Actual cost
- 2. Which of the following is a cost-estimating technique?
 - a) Variance management
 - b) Cost aggregation
 - c) Parametric estimating
 - d) Cost change control system
- 3. Which of the following is not a cost control technique?
 - a) Reserve analysis
 - b) Project performance reviews
 - c) Forecasting
 - d) Variance management
- 4. Which of the technique uses a statistical relationship between historical data and other variables to calculate a cost estimate for a schedule activity resource?
 - a) Parametric Estimating
 - b) Bottom-up Estimating
 - c) Vendor Bid Analysis
 - d) Reserve Analysis
- 5. Cost variance (CV) can be calculated as:
 - a) Earned value Actual cost
 - b) Earned value Planned value
 - c) Planned value Actual cost
 - d) Planned value Earned value
- 6. Estimating the cost of individual work packages or individual schedule activities with the lowest level of detail is called?
 - a) Parametric Estimating
 - b) Bottom-up Estimating
 - c) Vendor Bid Analysis
 - d) Reserve Analysis
- 7. Which of the following is not used to provide performance measurement of any work at given point of time?
 - a) Planned value
 - b) Budgeted cost at completion
 - c) Earned value

- d) Actual cost
- 8. Which of the following is not a cost control output?
 - a) Project management plan
 - b) Cost estimate
 - c) Cost breakdown information
 - d) Cost baseline
- 9. Schedule variance (SV) is termed as:
 - a) Earned value Actual value
 - b) Earned value Planned value
 - c) Actual cost planned value
 - d) Actual cost Earned value
- 10. Which of the following is not a cost budgeting input?
 - a) Project scope statement
 - b) Project schedule
 - c) Work breakdown structure
 - d) Performance reports

- 1. Which of the following does not belong to the 'Define' activity in the DMAIC Model of Six Sigma?
 - a) Determination of customer requirements
 - b) Determination of CTQs
 - c) Validating the measurements
 - d) Mapping the process
- 2. Which of the following cost consider as appraisal cost of quality?
 - a) Testing of material
 - b) Complaint adjustment
 - c) Liability cost
 - d) Data acquisition and analysis
- 3. Costs associated with the prevention of non-conformance to requirements is called.
 - a) Prevention Costs
 - b) Appraisal Costs
 - c) Internal Failure Costs
 - d) External Failure Costs
- 4. A product consists of 650 units of assembly. What is the probability that any specific unit of product is conforming, if we go by 3 sigma?
 - a) 15.25%
 - b) 16.25%
 - c) 17.25%
 - d) 18.25%
- 5. Six Sigma strategies seek to improve the quality of the output of a process by
 - a) Identifying the causes of defects
 - b) Removing the causes of defects
 - c) Minimizing variability in manufacturing
 - d) All of the above
- 6. Which of the following is not an objective of scientific purchasing?
 - a) Cost reduction
 - b) Maintain continuity in supply
 - c) Standardization
 - d) Performance evaluation
- 7. Which of the following is not a tool used in the 'Define' process in the DMAIC Model of Six Sigma?
 - a) Project charter and plan
 - b) Check sheet
 - c) Effort/impact analysis
 - d) Process mapping
- 8. Which of the following is not a dimension of Quality?

- a) Performance
- b) Serviceability
- c) Perishability
- d) Features
- 9. In which among the following is the Six Sigma process not applicable?
 - a) Healthcare
 - b) Business administration
 - c) Selecting the best employee of the year
 - d) Supply Chain
- 10. Which of the following terms specify with the character 'I' in DMAIC?
 - a) Implement
 - b) Integrate
 - c) Input
 - <mark>d) Improve</mark>