

Enrolment No.....



Faculty of Commerce / Management Studies

End Sem Examination Dec 2024

CM3EG05 / MS3EG06 Project Management

Programme: B.Com. / Branch/Specialisation: Commerce/  
BBA Management

**Maximum Marks: 60**

**Duration: 3 Hrs.**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

- |     | Marks     | BL  | PO  | CO                      | PSO |
|-----|-----------|---|-----|-------------------------|-----|
| Q.1 | <b>i.</b> | Which of the following statement is correct? <b>1</b> 1    1    1   |     |                         |     |
|     | I.        | Each project have definite objectives (goals) to achieve.   |     |                         |     |
|     | II.       | Each project have a specific time frame for completion with a definite start and finish.                          |     |                         |     |
|     | (a)       | Only I  | (b) | Only II                 |     |
|     | (c)       | Both (a) & (b)  | (d) | None of these           |     |
|     | ii.       | Project performance dimensions includes – <b>1</b> 1    1    1  |     |                         |     |
|     | (a)       | Time, Cost, Scope   | (b) | Resource, Price, Budget |     |
|     | (c)       | Time, Cost, Budget  | (d) | Time, Trend, Return     |     |
|     | iii.      | When determining the plant capacity, which factor is least likely to influence the decision? <b>1</b> 1    1    2 |     |                         |     |
|     | (a)       | Demand forecasts  | (b) | Workforce availability  |     |
|     | (c)       | Raw material costs  | (d) | Project schedule        |     |
|     | iv.       | Which of the following is a key factor in selecting technology for a project? <b>1</b> 1    1    2                |     |                         |     |
|     | (a)       | Technology trendiness   |     |                         |     |
|     | (b)       | Compatibility with existing systems   |     |                         |     |
|     | (c)       | Technology supplier's popularity  |     |                         |     |
|     | (d)       | Cost of the technology implementation   |     |                         |     |
|     | v.        | UNIDO stands for – <b>1</b> 1    1    3   |     |                         |     |
|     | (a)       | Union of National Integrated Development Offices  |     |                         |     |
|     | (b)       | Ultimate Net Income after Deduction of expenses   |     |                         |     |
|     | (c)       | United Nations Industrial Development Organisation  |     |                         |     |
|     | (d)       | United Nation's Indian Development Organisations  |     |                         |     |

[2]

- vi. SCBA stands for –  
 (a) Social Cost Benefit Analysis  
 (b) Social Channels for Business Activities  
 (c) Security Council for Border Association  
 (d) Systematic Cost Based Analysis

**1**    1    1    3

- vii. What is the primary purpose of conducting a break-even analysis in project finance?  
 (a) To determine the total costs of the project  
 (b) To find the point at which total revenue equals total costs  
 (c) To calculate the project's return on investment  
 (d) To identify potential investors

**1**    1    1    4

- viii Which of the following is NOT considered a long-term source of project finance?  
 (a) Equity shares                         (b) Debentures  
 (c) Bank overdraft                         (d) Term loans

**1**    1    1    4

- ix. In project management, what does the term "Critical Path Method (CPM)" primarily help to identify?  
 (a) The shortest time required to complete the project  
 (b) The tasks that can be completed in parallel  
 (c) The tasks that have no float  
 (d) The total cost of the project

**1**    1    1    5

- x. What is the key difference between PERT and CPM?  
 (a) PERT is deterministic, while CPM is probabilistic.  
 (b) PERT focuses on time, while CPM focuses on cost.  
 (c) PERT is used for research and development projects, while CPM is used for construction projects.  
 (d) PERT uses a network diagram, while CPM does not.

**1**    1    1    5

- Q.2 i. Define project management and discuss its importance in today's business environment.  
 ii. Explain the characteristics that distinguish a project from regular operations.  
 iii. Describe the different types of projects and provide examples for each.  
 OR iv. Discuss the project life cycle phases and their significance in project management.

**2**    1    1    1

**3**    2    1    1

**5**    2    1    1

**5**    2    5    1

[3]

- Q.3 i. What is risk identification in project appraisal? List its key components.

**2**    3    5    2

- ii. Explain the process of site selection for a project and its impact on project success.

**8**    3    5    2

- OR iii. Discuss the factors to consider when selecting technology for a project.

**8**    3    5    2

- Q.4 i. Outline the steps involved in conducting a market survey.

**3**    4    5    3

- ii. Describe various methods of data collection used in market analysis and their advantages.

**7**    4    5    3

- OR iii. Explain demand analysis and its role in project planning.

**7**    3    5    3

- Q.5 i. What are the main components involved in determining the cost of a project?

**4**    3    5    4

- ii. Compare and contrast short-term and long-term sources of project finance.

**6**    4    5    4

- OR iii. Explain profitability analysis and how it relates to project viability.

**6**    3    5    4

- Q.6 Attempt any two:

- i. Describe the process of risk management in project management. What are the key steps involved, and how do they contribute to project success?

**5**    4    5    5

- ii. Explain the concept of the critical path in CPM and its significance.

**5**    4    5    5

- iii. Compare PERT and CPM in terms of their characteristics and applications.

**5**    4    5    5

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[1]

**Marking Scheme  
CM3EG05 PROJECT MANAGEMENT**

1) Which of the following statement is correct?	1
Answer: (c) Both (a) & (b)	
2) Project performance dimensions includes –	1
Answer: (a) Time, Cost, Scope	
3) When determining the plant capacity, which factor is least likely to influence the decision?	1
Answer: (d) Project schedule	
4) Which of the following is a key factor in selecting technology for a project?	1
Answer: (b) Compatibility with existing systems	
5) UNIDO stands for –	1
Answer: (c) United Nations Industrial Development Organisations	
6) SCBA stands for –	1
Answer: (a) Social Cost Benefit Analysis	
7) What is the primary purpose of conducting a break-even analysis in project finance?	
Answer: B) To find the point at which total revenue equals total costs	
8) Which of the following is NOT considered a long-term source of project finance?	
Answer: C) Bank overdraft	
9) In project management, what does the term "Critical Path Method (CPM)" primarily help to identify?*	
Answer: A) The shortest time required to complete the project	
10) What is the key difference between PERT and CPM?*	
Answer: C) PERT is used for research and development projects, while CPM is used for construction projects.	

### Q.2

i. \*\*Define project management and discuss its importance in today's business environment. (2)\*\*

Project management is the application of knowledge, skills, tools, and techniques to project activities to meet project requirements. Its importance lies in its ability to ensure

that projects are completed on time, within budget, and according to specifications, thus maximizing efficiency and minimizing risks in a competitive business environment.

ii. \*\*Explain the characteristics that distinguish a project from regular operations. (3)\*\*

[2]

- **Uniqueness**: Projects are temporary and unique, aimed at producing a specific outcome or deliverable.
  - **Defined Scope and Objectives**: Projects have clear goals and defined objectives, unlike regular operations which are ongoing.
  - **Resources and Time Constraints**: Projects operate within specific timelines and allocated resources, whereas regular operations focus on maintaining ongoing processes.
- iii. **Describe the different types of projects and provide examples for each. (5)\*\***
- **Construction Projects**: Involves building structures (e.g., roads, bridges).
  - **IT Projects**: Focus on software development or IT infrastructure (e.g., a new application).
  - **Research Projects**: Aim at generating new knowledge or solutions (e.g., scientific research).
  - **Event Management Projects**: Focus on planning and executing events (e.g., conferences, weddings).
  - **Marketing Projects**: Involve campaigns or promotions to enhance market reach (e.g., product launch).

OR

iv. **Discuss the project life cycle phases and their significance in project management. (5)\*\***

The project life cycle consists of:

- **Initiation**: Defining the project and obtaining approval.
- **Planning**: Establishing objectives, schedules, and resource allocations.
- **Execution**: Implementing the project plan and performing the work.
- **Monitoring and Controlling**: Tracking progress and making adjustments.
- **Closure**: Finalizing all activities, delivering the project, and releasing resources.

Each phase is crucial for ensuring systematic progress and achieving project goals.

### Q.3

i. **What is risk identification in project appraisal? List its key components. (2)\*\***

Risk identification involves recognizing potential risks that could affect project objectives. Key components include:

- **Risk Categories**: Financial, technical, operational, and external risks.
- **Stakeholder Input**: Engaging stakeholders to identify their concerns.
- **Historical Data**: Analyzing past projects for common risks.

[3]

ii. \*\*Explain the process of site selection for a project and its impact on project success. (8)\*\*

The process of site selection involves:

- \*\*Needs Assessment\*\*: Identifying project requirements and constraints.
- \*\*Location Analysis\*\*: Evaluating geographic, economic, and environmental factors.
- \*\*Accessibility\*\*: Considering transportation and communication infrastructure.
- \*\*Regulatory Compliance\*\*: Ensuring compliance with local zoning laws and regulations.
- \*\*Cost Analysis\*\*: Assessing costs related to land acquisition, development, and operation.

The site selection impacts project success by influencing costs, operational efficiency, and access to resources and markets.

OR

iii. \*\*Discuss the factors to consider when selecting technology for a project. (8)\*\*

Factors include:

- \*\*Project Requirements\*\*: Aligning technology with project goals and specifications.
- \*\*Cost\*\*: Evaluating initial and ongoing costs of the technology.
- \*\*Scalability\*\*: Assessing the ability to adapt technology for future needs.
- \*\*Compatibility\*\*: Ensuring integration with existing systems.
- \*\*Vendor Support\*\*: Considering the availability of technical support and training.

### Q.4

i. \*\*Outline the steps involved in conducting a market survey. (3)\*\*

- \*\*Define Objectives\*\*: Clarify the purpose of the survey and the information needed.
- \*\*Design the Survey\*\*: Choose survey methods (e.g., questionnaires, interviews).
- \*\*Collect Data\*\*: Execute the survey and gather responses.
- \*\*Analyze Data\*\*: Evaluate the collected information to draw conclusions.
- \*\*Report Findings\*\*: Present the results and recommendations.

ii. \*\*Describe various methods of data collection used in market analysis and their advantages. (7)\*\*

- \*\*Surveys\*\*: Collect quantitative data quickly; can be done online or in-person.
- \*\*Interviews\*\*: Provide in-depth qualitative insights; allow for follow-up questions.

[4]

- \*\*Focus Groups\*\*: Facilitate discussions to gather diverse opinions; useful for product testing.

- \*\*Observation\*\*: Capture real-time behavior; minimizes respondent bias.

- \*\*Secondary Data Analysis\*\*: Leverages existing data; cost-effective and time-saving.

OR

iii. \*\*Explain demand analysis and its role in project planning. (7)\*\*

Demand analysis involves assessing the potential demand for a product or service. It helps in:

- \*\*Forecasting\*\*: Estimating future sales and market trends.
- \*\*Resource Allocation\*\*: Guiding production and inventory management.
- \*\*Risk Management\*\*: Identifying fluctuations in demand and preparing contingencies.
- \*\*Strategic Planning\*\*: Informing marketing strategies and pricing decisions.

### Q.5

i. \*\*What are the main components involved in determining the cost of a project? (4)\*\*

- \*\*Direct Costs\*\*: Expenses directly tied to project activities (e.g., materials, labor).
- \*\*Indirect Costs\*\*: Overhead costs that cannot be directly attributed (e.g., utilities, administrative expenses).
- \*\*Contingency Costs\*\*: Funds set aside for unforeseen expenses.
- \*\*Opportunity Costs\*\*: Potential income lost due to resource allocation to the project.

ii. \*\*Compare and contrast short-term and long-term sources of project finance. (6)\*\*

- \*\*Short-Term Financing\*\*: Typically involves loans or credit lines with repayment within a year. Used for immediate needs (e.g., operational costs).
- \*\*Long-Term Financing\*\*: Involves equity financing, long-term loans, or bonds, with repayment over several years. Suitable for capital investments (e.g., infrastructure).
- \*\*Key Differences\*\*: Duration, cost of capital, repayment structure, and impact on cash flow.

OR

iii. \*\*Explain profitability analysis and how it relates to project viability. (6)\*\*

Profitability analysis assesses the project's potential to generate profit relative to its costs. It helps determine:

- \*\*Return on Investment (ROI)\*\*: Measures the efficiency of an investment.

[3]

- **Break-Even Analysis**: Identifies the sales volume at which total revenue equals total costs.

- **Cash Flow Projections**: Evaluates the timing and amount of cash inflows and outflows.

A positive profitability analysis indicates project viability and sustainability.

### Q.6 Attempt any two:

i. **Describe the process of risk management in project management. What are the key steps involved, and how do they contribute to project success? (5)\*\***

Risk management in project management involves identifying, analyzing, and responding to project risks to minimize their impact on project objectives. The key steps in this process are:

**Risk Identification** : This step involves systematically identifying potential risks that could affect the project. Techniques such as brainstorming, expert interviews, checklists, and SWOT analysis can be used. Key outcomes include a comprehensive list of risks, categorized by type (e.g., technical, financial, operational).

**Risk Analysis**: Once risks are identified, they are analyzed to understand their potential impact and likelihood. This can be done through qualitative analysis (assessing risks based on their severity and probability) and quantitative analysis (using numerical methods to quantify risks). This step helps prioritize risks based on their potential effect on the project.

**Risk Response Planning**: For each significant risk, a response plan is developed. Common strategies include:

**Avoidance**: Changing the project plan to eliminate the risk.

**Mitigation**: Taking steps to reduce the likelihood or impact of the risk.

**Transfer**: Shifting the risk to a third party (e.g., insurance).

**Acceptance**: Acknowledging the risk and preparing to manage its consequences if it occurs.

**Risk Monitoring and Control**: Throughout the project, risks should be continuously monitored. This involves tracking identified risks, reassessing their status, and implementing response plans as necessary. Regular reviews and updates to the risk management plan ensure that new risks are identified, and responses remain effective.

**Communication and Documentation**: Effective communication about risks is crucial. All stakeholders should be aware of potential risks and the plans in place to address them. Documentation of risks, analysis, and responses helps ensure transparency and provides a reference for future projects.

Contribution to Project Success

[4]

The process of risk management contributes to project success in several ways: **Proactive Approach**: By identifying and analyzing risks early, teams can develop strategies to prevent issues from arising, reducing the likelihood of project delays and cost overruns.

**Informed Decision-Making**: Risk analysis provides valuable data that supports informed decision-making, allowing project managers to allocate resources effectively and prioritize tasks.

**Improved Stakeholder Confidence**: Demonstrating a systematic approach to risk management enhances stakeholder confidence in the project's viability and management capability.

**Enhanced Project Control**: Continuous monitoring and control of risks enable teams to respond swiftly to emerging threats, helping to keep the project on track.

**Increased Likelihood of Meeting Objectives**: By effectively managing risks, project teams can better ensure that project objectives—such as scope, schedule, and budget—are achieved, leading to overall project success.

ii. **Explain the concept of the critical path in CPM and its significance. (5)\*\***

The critical path is the longest sequence of dependent activities in a project, determining the shortest completion time. Its significance includes:

- **Time Management**: Identifies tasks that directly affect project duration.
- **Resource Allocation**: Helps prioritize resource allocation to avoid delays.
- **Risk Identification**: Highlights areas where project risks may occur.

iii. **Compare PERT and CPM in terms of their characteristics and applications. (5)\*\***

- **Focus**: PERT (Program Evaluation Review Technique) emphasizes uncertainty in project scheduling, while CPM (Critical Path Method) focuses on deterministic time estimates.

- **Nature of Projects**: PERT is used for R&D and projects with uncertain timelines; CPM is suited for construction projects with predictable durations.

- **Diagramming**: PERT uses a network diagram to show project tasks and dependencies; CPM uses a flowchart for visualizing critical tasks and paths.

- **Flexibility**: PERT allows for multiple time estimates; CPM typically uses one duration estimate per activity.