

Unit 1

1. Briefly explain the different phases of project management life cycle. Or Explain the stages involved in Project Management Life Cycle in detail.
2. What is project charter in software project management? What are the elements of project charter?
3. What is project portfolio management? Explain the key aspects of project portfolio Management. Or Write a note on Project portfolio management. Or Write a short note on Portfolio Management.
4. Write a note on risk evaluation and management.
5. Define a term Project and give the importance of Software Project Management.
6. What is a project product? Explain Product Breakdown Structure with the help of example.
7. What do you mean by scope and objective of a project? List the activities involved in identifying project scope and objective. Or what the importance is of identified the scope and objective of a project.
8. Define project. Discuss some characteristics of software project which make them more difficult to manage compared to other projects.
9. Define Business Case. Specify the content of business case document.
10. Define Net Profit, Payback Period and Returns on Investment.
Calculate these values for the following cash flow forecast of a project.

Year	Cash flow
0	- 1,00,000
1	20,000
2	30,000
3	20,000
4	30,000
5	60,000

11. Outline the general approach that might be taken for project planning in an organized step by step manner.
12. Name different. Give very brief description of all the phases of Project Management life cycle (2 to 3 lines) and explain W5HH principle.
13. How is resource allocation managed in an activity of program management?
14. Define the following terms:
 - i)Net profit ii)Return on Investment iii)Payback period iv)Net present value
 - v)Internal rate of return

Unit 2

1. What do you understand by the term ‘ceremonies’ in a scrum project? Explain the different types of ceremonies that are observed in a Scrum project and their significance.
2. List the advantages and disadvantages of software prototyping
3. Explain the five major components of Albrecht Function Point Analysis.
4. What are effort multipliers in COCOMO II model? List the effort multipliers used at early design
5. Explain eight core principles of Dynamic Systems Development Method.
6. State Capers Jones rules of thumb for software estimation. Or State and explain Capers Jones estimating rules.or Discuss Capers Jones estimating rules of thumb.
7. Describe briefly five steps of project analysis.
8. Explain Scrum. What do you understand by the term ‘ceremonies’ in a Scrum project? Explain different types of ceremonies observed in a Scrum Project.
9. Discuss eight core Atern principles.
10. What are the problems generally faced during effort estimation? or Discuss the common problem faced during effort estimation.
11. Explain briefly Albrecht/IFPUG function points and solve the following :-
For an organization, the following table summarizes the weightings to be used for computing function points measures of a software development project. The organization has undertaken the development of a software having the following characteristics:-

Number of user inputs-	10(simple)
Number of user outputs	7 (simple)
Number of user inquiries	3 (average)
Number of files	6 (average)
Number of external interfaces	1 (complex)

Calculate unadjusted function point measure of the size of the software system?

12. What are the advantages and disadvantages of Spiral model.
13. Explain different approaches used for fast delivery of a project.
14. Explain the top down approaches associated with parametric models.
15. Write a note on COCOMO II model.

Unit 3

1. With the help of example explain forward pass and backward pass to calculate activity duration in network diagram.
2. Write short note on Project Evaluation and Review Technique.
3. Explain Boehm's top ten software project risks and the different strategies for reducing it.
4. Explain the different categories of cost incurred in a software project.
5. What is resource smoothing? Explain two different ways of prioritizing activities for resource allocation.
6. Define activity. Discuss three approaches to identify the activities.
7. Define Risk and discuss the ways of dealing with them.
8. Explain the process of scheduling resources.
9. What is the necessity of activity planning?
10. Explain network planning model and the concept of backward pass.
- 11.
12. Discuss the factors to be taken into account while allocating individuals to task.
13. Define the term risk and discuss the ways to deal with them.
14. Describe Monte Carlo simulation.
15. Explain the nature of resources and their scheduling
16. What are the factors considered while allocating task to the individual.
17. Suppose four risks namely R1, R2, R3 and R4 have been identified and assigned the probabilities of occurrence of 0.1, 0.2, 0.3 and 0.4 respectively. The likely damages due to the four risks are Rs. 50, 000; Rs. 1, 00,000; 70,000; 60,000 respectively. Calculate the risk exposure of all the risks.
18. Define the following terms
 - i)Critical path
 - ii)Float
 - iii)Free float
 - iv)Interfering float
 - v)Hammock activity

Unit 4

1. Explain review process model with the help of diagram.
2. What is meant by software configuration management? Explain the two principal activities of configuration management.
3. Explain the main sections in a requirement document for contract placement.
4. What is fixed price contract? List the advantages and disadvantages of fixed price contract.
5. What are three important categories of stress management techniques?
6. Explain Vroom's expectancy theory of motivation.
7. Explain the change control process.
8. Define the following:- i) Schedule Variance ii) Cost Variance iii) Earned Value
iv) Schedule performance index v) Cost performance index
9. Explain briefly all the stages in Contract Placement.
10. Define Contract. Classify contracts on the basis of payment to suppliers.
11. Explain general recruitment process.
12. Discuss the factors of job satisfaction given by Oldham-Hackman. Also state the methods of improving motivation.
13. Explain the stages in contract placement.
14. Explain Taylor's model of motivation.
15. Write a note on change control.
16. Give the benefits of review in the process of project monitoring and control.
17. Write a note on ethical and Professional concerns as a member of any organization.
18. Explain the advantages and disadvantages of fixed price contracts.

Unit 5

1. Explain the advantages of a functional organization over project organization.
2. List the obstacles to good group decision making. Also explain Delphi decision making process.
3. Write short note on SEI capability maturity model.
4. What is reliability growth model? Explain any two reliability growth models.
5. What are the steps of conducting a post implementation project review?
6. Explain the different reason for which a project may need to be terminated
7. What do you mean by team structure? Explain different types of team structures.
8. Explain five basic stages of Team development. Also state the different types of people needed to form a balanced team. **Or** Write a role of different types of people needed to form a balanced team.
9. State and explain different levels of Capability Maturity Model(CMM).
10. Define the term quality. Explain McCall's quality model.
11. What is the importance of Software Quality? Discuss six major external software quality characteristics identified by ISO 9126.
12. State four popular process capability models and explain any one of them.
13. Give a brief explanation of the main activities involved in Software Testing
14. Discuss the main reasons for project closure.
15. Describe a virtual team and the advantages of forming a virtual team.
16. Explain the metric correlation with software reliability.