

(2½ Hours)

[Total Marks: 75]

- N. B.: (1) **All** questions are **compulsory**.
 (2) Make **suitable assumptions** wherever necessary and **state the assumptions** made.
 (3) Answers to the **same question** must be **written together**.
 (4) Numbers to the **right** indicate **marks**.
 (5) Draw **neat labeled diagrams** wherever **necessary**.
 (6) Use of **Non-programmable** calculators is **allowed**.

1. Attempt any three of the following:

15

- Define a term project and give the importance of Software Project Management
- Explain the stages involved in project management life cycle in detail.
- Write a note on Project portfolio management.
- What is the importance of identifying the scope and objectives of a project?
- How is resource allocation managed in an activity of programme management?
- Write a note on risk evaluation and management.

2. Attempt any three of the following:

15

- Explain different approaches used for fast delivery of a project.
- What are the advantages and disadvantages of a Spiral model?
- Discuss the common problems faced during effort estimation.
- State and explain Capers Jones estimating rules.
- Explain the top down approach associated with parametric models.
- Write a note on COCOMO II model.

3. Attempt any three of the following:

15

- What is the necessity of activity planning?
- Explain network planning model and the concept of backward pass.
- Define the term risk and discuss the ways to deal with them.
- Describe Monte Carlo simulation.
- Explain the nature of resources and their scheduling.
- What are the factors considered while allocating tasks to the individuals?

4. Attempt any three of the following:

15

- Give the benefits of review in the process of project monitoring and control.
- Write a note on change control.
- Explain the advantages and disadvantages of fixed price contracts.
- Explain the stages in contract placement.
- Write a note on ethical and professional concerns as a member of any organization
- Explain Taylor's model of motivation.

5. Attempt any three of the following:

15

- Describe a virtual team and the advantages of forming a virtual team.
- Write a role of different types of people needed to form a balanced team.
- Define the term quality. Explain McCall's quality model.
- State and explain different levels of Capability Maturity Model (CMM).
- Explain the metrics correlated with Software reliability.
- Discuss the reasons for project closure.