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**MCA**  
**(SEM III) THEORY EXAMINATION 2021-22**  
**SOFTWARE PROJECT MANAGEMENT**

**Time: 3 Hours****Total Marks: 100****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.

**SECTION A**

- 1. Attempt all questions in brief. 2 x 10 = 20**
- a. What is contract management?
  - b. Differentiate between task and activities.
  - c. How to identify and estimate the cost of project?
  - d. How does software project different from other engineering project?
  - e. How to calculate the net present value for a software project?
  - f. How is CPI different from SPI?
  - g. How are risk classified?
  - h. What is monitor earned value?
  - i. What is software re-engineering?
  - j. What are the methods used to improve motivation?

**SECTION B**

- 2. Attempt any three of the following: 10 x 3 = 30**
- a. List the Outline of stepwise project planning.
  - b. Explain how project can be evaluated against strategic, technical, and economic criteria.
  - c. Discuss the network model represented by the CPM network.
  - d. What is the role of time estimation in a software development? Compare optimistic and pessimistic time estimation.
  - e. List the factors that are involved in making a team. Explain the characteristics.

**SECTION C**

- 3. Attempt any one part of the following: 10 x 1 = 10**
- (a) With neat diagram explain stepwise Objective and goals of project planning.
  - (b) Define the scope of software project management
- 4. Attempt any one part of the following: 10 x 1 = 10**
- (a) Explain different three stages of COCOMO II model.
  - (b) Describe how cost- benefit evaluation techniques can be used to choose the best among competing project proposal.
- 5. Attempt any one part of the following: 10 x 1 = 10**
- (a) Discuss Monte Carlo simulation with neat diagram.
  - (b) Describe with an example how the effect of risk on project schedule is evaluated using PERT.
- 6. Attempt any one part of the following: 10 x 1 = 10**
- (a) Does monitoring and control affect the project schedule? Explain.
  - (b) Explain the earned value analysis methods.
- 7. Attempt any one part of the following: 10 x 1 = 10**
- (a) Explain the method to overcome from stress, health, and safety issues in managing the people and organizational teams.
  - (b) Explain the Oldham-hackman job characteristic model.