Roll No: | | | | | | | | | | | | | |

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. Discus 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.