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Roll No.

TMC-206

M. C. A. (SECOND SEMESTER)

MID SEMESTER

EXAMINATION, April, 2023

**SOFTWARE ENGINEERING AND PROJECT
MANAGEMENT**

Time : 1½ Hours

Maximum Marks : 50

Note : (i) Answer all the questions by choosing
any *one* of the sub-questions.

(ii) Each sub-question carries 10 marks.

1. (a) Define the term software engineering.
What are the reasons of software crises ?
What are the solutions of software crises ?

(CO1)

OR

- (b) Elaborate software process. What are the
various characteristics of a software
process ?

(CO1)

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(2)

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2. (a) Express the importance of prototype model of software development. In which situation it is better to use prototype model ?
(CO2)

OR

- (b) Recognize the importance of software quality. What are the various matrices of software quality ?
(CO2)
3. (a) Discriminate between Spiral model and waterfall model. In which situation use of waterfall model is best ?
(CO3)

OR

- (b) Demonstrate the importance of software reliability ? List any *two* reliability models and explain any *one*.
(CO3)
4. (a) Analyze following phases related to software project management life cycle :
(i) Initiation phase
(ii) Planning phase
(iii) Execution phase
(iv) Closing phase
(CO4)

(3)

OR

- (b) Examine the following :
(i) Six-Sigma
(ii) Just in time
(iii) Total quality management
(CO4)

5. (a) Analyze the following :
(i) LOC
(ii) COCOMO
(iii) Task network
(iv) PERT chart
(CO4)

OR

- (b) Assume that the size of an organic type software product has been estimated to be ₹ 32,000 lines of source code. Assume that the average salary of a software developer is ₹ 15,000 per month. Determine the effort required to develop the software.
(CO4)

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