# 333653(33)

## B. E. (Sixth Semester) Examination, April-May 2020

### (New Scheme)

### (IT Branch)

## SOFTWARE ENGINEERING & PROJECT MANAGEMENT

*Time Allowed : Three hours*

*Maximum Marks : 80*

*Minimum Pass Marks : 28*

*Note : Attempt all questions. Part (a) of each question is compulsory and carries 2 marks. Attempt any two parts from (b), (c) & (d) of each question which carries 7 marks each.*

### Unit-I

1. (a)  Define Software and Software Engineering.          2

(b) Discuss the various managerial issues that are to be taken into consideration in the software development process. 7

(c) Explain Win-Win Spiral model for project management process for software development. 7

(d) Explain the following software process models : 7

(i) Rapid Application Development Model

(ii) Incremental Model

## Unit-II

2. (a) Explain functional and non-functional requirements. 2

(b) What is SRS? How SRS is useful in software development? 7

(c) "SCM will sequentially control the changes during the software development." Comment. 7

(d) Explain requirement engineering. Also explain each step of requirement engineering process. 7

## Unit-III

3. (a) What do you mean by good design? 2

(b) Explain cohesion and coupling related to software design process. 7

(c) Explain Milestone, walkthrough and inspection. 7

(d) Explain Architectural design and user interface design. 7

## Unit-IV

4. (a) Write difference between Verification and Validation. 2

(b) What are the different types of tests that software undergoes during the life cycle? 7

(c) Explain difference between white box and black box testing. 7

(d) What is Debugging? And discuss their types. 7

## Unit-V

5. (a) Explain Software Maintenance. 2

(b) Explain software cost estimation techniques. 7

(c) Describe that CASE tools. 7

(d) Assume that size of a semi-detached type software project is 30000 LOC. Compute the effort and duration of the project. 7