

**322654(22)**

**B. E. (Sixth Semester) Examination,**

**Nov.-Dec. 2021**

**(New Scheme)**

**(CSE Branch)**

**SOFTWARE ENGINEERING & PROJECT  
MANAGEMENT**

*Time Allowed : Three hours*

*Maximum Marks : 80*

*Minimum Pass Marks : 28*

*Note : All questions are compulsory. Part (a) from each question is essential and carries 2 marks. Any two parts may be attempted out of (b), (c) and (d). Each part is of 7 marks.*

**Unit-I**

1. (a) What are the disadvantage and limitation of waterfall model? 2

- (b) Described WIN WIN SPIRAL model for software development with its advantages and limitations. 7
- (c) How the quality and productivity factors affect the software development? 7
- (d) Explain the CMMI model for software quality assurance in detail. 7

### Unit-II

2. (a) What are the different Non functional requirements in software? 2
- (b) Briefly explain the requirement elicitation and analysis during s/w development. 7
- (c) Explain the context model and object model for any software. 7
- (d) Draw the behavioural model for ONLINE product purchase through E Commerce sites in at least 10 levels. 7

### Unit-III

3. (a) Define Modularization and Abstraction. 2

- (b) Define Coupling and Cohesion and order their different types from loose to Highest strength. 7
- (c) Describe Hallstead Software Science for effort and time calculation of software development. 7
- (d) Explain the Cyclometric Complexity calculation of any flow chart with suitable example. 7

**Unit-IV**

4. (a) Define Verification and Validation. 2
- (b) Explain the different methods of Software Quality Measurement. 7
- (c) Explain the software maintenance metrics in details. 7
- (d) Explain different methods of software testing in details. 7

**Unit-V**

5. (a) Name the different tools used for designing a s/w project schedule. 2

- (b) What is project charter and what is its relevance for any s/w project? 7
- (c) Explain Proactive and Reactive Risk management strategy in detail. 7
- (d) What is Software Reliability? How it is measured and improved? 7