

Roll No.

Total Pages : 2

BT-6/M-20

36018

SOFTWARE ENGINEERING

Paper-IT-354

Time : Three Hours]

[Maximum Marks : 100

Note : Attempt *five* questions in all, selecting at least *one* question from each unit. All questions carry equal marks.

UNIT-I

1. (a) Explain how both waterfall and prototyping model of software process can accommodate spiral model. 10
(b) Name various software Project Estimation Techniques and explain the structure of typical Estimation Model. 10
2. (a) Discuss the limitations of Software process models. Which according to you is the best model of software development? Justify your answer.
(b) Discussed about COCOMO II model for software estimation.

UNIT-II

3. (a) What is meant by modular design? When and how should a modular design be implemented? 10
(b) What are the principles of Structured Analysis? 10

4. (a) What do you mean by functional and non-functional requirements? Give at least five examples of each type of requirements. 10
- (b) Explain in detail about DFD and structure chart. 10

UNIT-III

5. (a) What are the characteristics of a good test case? Discuss static and dynamic analysis in testing. 08
- (b) Demonstrate the Cause Effect Graphing Technique for designing the test case for payroll system. 12
6. (a) What is alpha and beta testing? What are few positive to having a beta test program for your software? 10
- (b) Explain call graph based integration. Explain the strategies under call based integration testing. 10

UNIT-IV

7. (a) What is meant by software quality management? Explain the difference between ISO and SEI-CMMI approach for software quality. 10
- (b) Explain the following terms in detail : 10
- (i) Computer aided software engineering.
- (ii) ISO 9000 Quality Standards.
8. (a) What do you understand by Software Quality Assurance? Also discuss the steps needed for Quality Assurance. 12
- (b) List and explain the various software quality factors. 08