

Level: Bachelor Semester: Fall Year: 2021
Programme: BE Full Marks: 100
Course: Software Testing, Verification, Validation and Quality Assurance Pass Marks: 45
Time : 3hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Attempt all the questions.

1. a) Define Error, Fault and Failure. Clarify with proper example for each term and their relationship. 7
b) Explain with appropriate scenario regarding Pesticide paradox and Pareto principle. 8
2. a) How is software verification carried out? Is audit different from inspection? Explain. 7
b) What are various approaches for validating any software product? Mention with categories of product. 8
3. a) Why are there so many variations of development and testing model? How would you choose one for your project? What would be the selection criteria? 7
b) Briefly explain about formal review and its importance. Describe about its main activities. 8
4. a) What are the criteria of selecting a particular test technique for a software? Highlight the difference between structured based and specification based testing. 8
b) What kind of testing is performed when you have deadline approaching near and you have not tested anything? Explain the importance of such testing. 7
5. a) What do you mean by test plan? What are the things to keep in mind while planning a test? 5
b) Describe configuration management. Highlight with example how tracking and controlling of software is achieved. 5
c) What do you mean by Risk in software testing? Explain about Product Risk. 5
6. a) "Introducing a new testing tool to a company may bring Chaos". 8

What should be considered by the management before introducing such tools to an organization? Support your answer taking scenario of any local level Company.

- b) Differentiate between web app testing and mobile app testing. 7
7. Write short notes on: (Any two) 2×5
a) Bug cost increases over time
b) Process quality
c) Incident management