Level: Bachelor Semester: Fall Year : 2017
Programme: BE Full Marks: 100
Course: Software Testing, Verification, Validation Pass Marks: 45
  and Quality Assurance 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 SQA. Describe about the main reason that causes software to have flaws in them. 5
   b) Describe in details about the Testing principles. 7
2. a) What do you mean by Verification process? With a hierarchical diagram, mention briefly about its types. 7
   b) How can a software artifact be validated before delivering? Explain with some techniques. 8
3. a) Differentiate between Retesting and Regression testing. What is Acceptance testing? 7
   b) "Static techniques find causes of failures." Justify it. Why is it different than Dynamic testing? 8
4. a) Write about: 8
      i. Equivalence partitioning
      ii. Use Case testing
      iii. Decision table testing
      iv. State transition testing
   b) If you are a Test Manager for a University Examination Software System, how do you perform your testing activities? Describe in detail. 7
5. a) Write about In-house project comparing against Project for Clients. What are the cons of working in Project for Clients? 5
   b) Mention various types of testers. Write roles and responsibilities of a test leader. 5
   c) What is an incident in Software development? What is the proper way to handle the incident mechanism? 5

6. a) Is Compiler a testing tool? Write your views. What are different types of test tools necessary for test process activities? 8
   b) In any web application testing, what sort of techniques should be undertaken for qualitative output? 5
   c) Describe why it is tough to check a mobile application. 5
7. Write short notes on: (**Any two**) 2×5
   a) Software failure with example
   b) ISO and CMMI
   c) Entry and Exit Criteria