

Total No. of Questions : 12]

SEAT No. :

**P1891**

[Total No. of Pages : 2

**[5059] - 211**

**B.E. Computer Engineering**

**SOFTWARE TESTING AND QUALITY ASSURANCE**

**(2008 Pattern) (Elective - II) (Semester - I)**

*Time : 3 Hour]*

*[Max. Marks : 100*

*Instructions to the candidates:*

- 1) Answers to the two sections should be written in separate answer books.*
- 2) Answer three questions from Section-I and three questions from Section-II.*
- 3) Neat diagrams must be drawn wherever necessary.*
- 4) Figures to the right side indicate full marks.*
- 5) Assume Suitable data if necessary*

**SECTION - I**

- Q1)** a) Give the importance of software testing. Explain the V model for software testing. [8]
- b) Explain the verification and validation with examples. [8]

OR

- Q2)** a) Explain the defect life cycle with defect report. [8]
- b) Explain the testing principles and criteria for completion of testing. [8]
- Q3)** a) Give the design of test cases for online book ordering system. [10]
- b) Compare the white box and black box testing with their challenges. [8]

OR

- Q4)** a) Explain black box testing methods. [10]
- b) Explain the purpose of positive and negative testing with the design of test cases. [8]
- Q5)** a) Explain the graph based testing with example. [8]
- b) Describe the loop testing and mutation testing. [8]

**P.T.O.**

OR

- Q6)** a) Explain boundary value testing and equivalence partitioning. [8]  
b) How do the test cases are derived in basis path testing? [8]

**SECTION - II**

- Q7)** a) What is GQM? How it is used in testing? [8]  
b) What is the need of validation testing? Explain validation testing methods. [10]

OR

- Q8)** a) Describe scenario testing and regression testing. [10]  
b) Explain the testing measurement tools and metrics. [8]
- Q9)** a) Explain six sigma in software quality management. [8]  
b) Describe the role of quality control in testing. [8]

OR

- Q10)** Explain the following: [16]  
a) Testing phases  
b) TQM  
c) SQA activities

- Q11)** a) Explain the GUI testing with an automation testing tool. [8]  
b) Compare manual and automation testing with examples. [8]

OR

- Q12)** a) Explain the need of automation testing. Give the automated test case design with a tool. [8]  
b) How functional testing can be automated? Explain with a web application. [8]

