

M.E. Second Semester (Information Technology) (Full Time) (C.G.S.)  
13431 : Elective-II : Software Testing : 2 NMEF 5

P. Pages : 2

Time : Three Hours



AU - 3312

Max. Marks : 80

- Notes :
1. All question carry equal marks.
  2. Due credit will be given to neatness and adequate dimensions.
  3. Assume suitable data wherever necessary.
  4. Illustrate your answer necessary with the help of neat sketches.
  5. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) Differentiate between functional testing and structural testing. 7  
b) Explain the different levels of testing. 7

OR

2. a) Explain the phases in a testers mental life. 7  
b) Explain the model of testing with neat diagram. 7
3. a) Explain. 6  
i) Mutation testing and.  
ii) Regression testing.  
b) What is test database? Explain the role of test database in transaction. 7

OR

4. a) What is regression testing? Explain with example. 7  
b) What are the techniques used for selecting the test cases? Explain. 6
5. a) List the different path testing criteria. Explain how this criteria are obtained. 7  
b) Describe the test repository of knowledge. 6

OR

6. a) What is integration process? Explain top-down and bottom-up integration process. 7  
b) What is software reliability? Explain with example. 6
7. a) Describe the difference in object oriented testing. Hence explain all the topics for testing OO systems. 14

**OR**

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|----|----|--|---|
| 8. | a) | What is loop testing? Why it is crucial in terms of software testing process.                | 7 |
|    | b) | Why do integration & system testing assume special importance for an object oriented system? | 7 |
| 9. | a) | Why do we have to retest subclasses that are instituted from on existing class.              | 6 |
|    | b) | Explain regression and performance testing tools.  | 7 |

**OR**

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|-----|----|---|---|
| 10. | a) | Explain testing management process.                                   | 6 |
|     | b) | What is action driven automation skill.                               | 7 |
| 11. | a) | What is meant by code optimization? Explain.                          | 7 |
|     | b) | What are the similarities between product development and automation. | 6 |

**OR**

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|-----|----|--|---|
| 12. | a) | Describe any four important features of QTP. | 4 |
|     | b) | Explain in detail Java coding guidelines.    | 9 |

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