

M.Sc. - II (Computer Science) (NEP Pattern) - Semester-III
03MSCCS01 - Paper-I : Software Testing and Quality Assurance

P. Pages : 2

Time : Three Hours



GUG/W/24/15967

Max. Marks : 80

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- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat and labelled diagram and use supporting data wherever necessary.
 3. Avoid vague answer and write specific answer related to questions.

Either:

1. a) Define Software Quality and explain role of testing in detail. 8
- b) What is the role of White-Box and Black Box testing in software testing. 8

OR

- c) Write a note on- 8
 - i) Central issue in Testing
 - ii) Testing Activities
- d) What is the difference between verification and validation in software engineering? 8

Either:

2. a) Explain basic concepts of theory of Goodenough and Gerhart. 8
- b) What is Advantages and limitations of testing? Explain. 8

OR

- c) Explain the power of Test Methods in detail. 8
- d) Write a note on- 8
 - i) Unit Testing
 - ii) Control flow testing

Either:

3. a) What do you mean by Functional Testing? Why it is important of Functional testing. 8
- b) Explain Test Generation from FSM Models. 8

OR

- c) What is Basic tests? Explain any two type of Basic tests. 8
- d) What is Robustness tests? Explain any two type of Robustness tests. 8

Either:

- 4. a) Explain the ISO9001:2000 Requirement in detail. 8
- b) What is maturity models? Explain basic idea in software process. 8

OR

- c) Explain McCall's Quality Factors and it's criteria. 8
- d) What is capability maturity model? Explain five levels of maturity. 8

- 5. Solve all the questions.

- a) Explain monitoring and measuring test Execution. 4
- b) What is Domain testing? Explain. 4
- c) Explain Graphical user Interface tests. 4
- d) Write a note on Test process improvement. 4
