[6263]-92

B.E. (Computer Engineering)

SOFTWARE TESTING AND QUALITY ASSURANCE

(2019 Pattern) (Semester - VII) (Elective - IV) (410245D)

Time : 2½ Hours]   *[Max. Marks : 70*

Instructions to the candidates :

1) *Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Figures to the right indicate full marks.*
4) *Assume suitable data, if necessary.*

Q1) a) Explain White box testing and Grey box testing in detail. **[6]**

b) Discuss Boundary Value Analysis and Equivalence Class Partition. **[6]**

c) Differentiate between Functional testing and Non-functional testing. **[6]**

OR

Q2) a) Explain the following test case design techniques : **[6]**

i) Informal Reviews

ii) Walkthroughs

iii) Inspection

b) What is Cookies testing? Explain Cookies testing with an example. **[6]**

c) Discuss Loop coverage testing and types of it in detail. **[6]**

Q3) a) Explain the following requirements of a product : **[4]**

i) Stated / Implied requirements

ii) Present / Future requirements

b) With neat diagram discuss waterfall model of software development. Also explain its limitations. **[8]**

c) Write a note on Customer Satisfaction. **[5]**

OR

P.T.O.

Q4) a) Give types of products based on the basis of criticality to the user. Explain each type with proper example. **[8]**

b) Discuss problematic areas in software development life cycle. **[6]**

c) List and explain limitations of Capability Maturity Models [CMM]. **[3]**

Q5) a) Differentiate between Manual Testing and Automation Testing. **[6]**

b) List and explain benefits of Automation testing. **[6]**

c) What is Performance testing? Explain the uses of it as well. **[6]**

OR

Q6) a) What is Automation testing? Explain it with an example. **[6]**

b) With neat diagram explain Automated testing process. **[6]**

c) Describe Apache Jmeter based on : **[6]**

i) Aim / Purpose

ii) Working

iii) Advantages

Q7) a) Explain the activities to achieve high software quality in detail. **[8]**

b) Write a note on Six Sigma strategy of software quality assurance. **[6]**

c) Explain in brief : Histogram, Flowchart and Control chart. **[3]**

OR

Q8) a) Explain ISO 9000 Standard in detail. **[6]**

b) Write a note on Software Quality Assurance [SQA] plan. **[5]**

c) Explain Ishikawa's basic tools for quality control. **[6]**

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