

Roll No. p

Total No. of Pages : 02

Total No. of Questions : 09

MCA (2015 & Onward) (Sem.-6)
SOFTWARE TESTING & QUALITY MANAGEMENT
Subject Code : MCA-604
M.Code : 74758

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students has to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**

SECTION-A

1. **What is Software Testing? What are its objectives? What are the limitations of testing? Briefly discuss the different levels of testing with examples.**
2. **What do you mean by testing strategy? Discuss in detail the various testing strategies.**

SECTION-B

3. **What is Data Flow Testing? What are the advantages of Data Flow Testing? Explain the Data Flow Model with an example.**
4. **What is a Regular Expression? Discuss regular expressions and flow anomaly detection in detail.**

SECTION-C

5. **What do you mean by Software Quality? What are the various attributes of quality? Explain each with examples.**
6. **Discuss the process of quality planning. What are the various tools and techniques for quality planning?**

SECTION-D

7. What is SQA plan? Explain the activities involved in SQA plan.
8. Briefly discuss the following :
 - a) Control charts
 - b) Pareto diagrams

SECTION-E

9. **Write briefly :**
 - a. Define the terms :
Error, Fault and Failure.
 - b. Differentiate between testing and debugging.
 - c. What is hybrid approach to software testing?
 - d. Differentiate between p-use and c-use with an example.
 - e. What is a path predicate?
 - f. What is path product?
 - g. What are the various metrics for software quality?
 - h. Discuss the SPICE project in brief.
 - i. What are the different levels of CMMI model?
 - j. Define quality audit.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.