Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

MCA   (Sem.–6)
SOFTWARE TESTING & QUALITY MANAGEMENT
Subject Code : MCA-604
M.Code : 74758
Date of Examination : 12-07-22

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 the objectives and purpose of software testing? Discuss the basic principles of testing in detail.

2. Discuss in detail the different types of software testing and their applicability.

SECTION-B

3. What do you mean by Path testing? What are the techniques of path testing? Discuss in detail.

4. Explain regular expression and flow anomaly detection.

SECTION-C

5. Define the term Software Quality. Discuss various quality attributes and standards.

6. What is Total Quality Management (TQM)? Discuss the various TQM models in brief.

SECTION-D

7. What is Quality Planning? What are the different tools and techniques for software quality planning?

8. Elaborate in detail any two tools used for quality control.

SECTION-E

9. **Briefly answer the following :**

   a) "*Can software be completely tested*"? Justify your answer.

   b) Define the problem of infeasible paths.

   c) What are testing levels?

   d) What is white-box testing?

   e) What is a Flow Graph?

   f) What are Path Sums?

   g) What is a Metric? What is the use of metrics? Name any two software quality metrics?

   h) What is CMMI?

   i) Define the term Software Quality Assurance.

   j) What are quality audits? What is their use?

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.