

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF COMPUTER APPLICATIONS
EXAMINATION : JANUARY- 2023
SEMESTER - I

Sub : Software Engineering & Testing (MCA- 103-22)

Date : 06/01/2023

Total Marks : 60

Time: 10.00 am to 12.30 pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

Q. 1. Answer the following in 2 - 3 lines. (Any 5) (10)

1. Define open and closed system.
2. What is a testcase?
3. Define system and its basic elements.
4. Define quality in terms of software quality assurance.
5. Define validation.
6. Define SDLC.
7. What is need of SOA.

Q. 2. Answer the following in short. (Any 4) (20)

1. Difference between Deterministic and Probabilistic systems.
2. Explain characteristics of a system.
3. Draw and explain spiral model in software development.
4. Describe various testing objectives.
5. Difference between white box and black box testing.
6. Explain why and how evaluation is done.

Q. 3. Answer the following in detail. (Any 3) (30)

1. Explain the methods used in validation.
2. Discuss the multifaceted role of system analysis.
3. Explain how waterfall model works in feedback control mechanism with illustrative diagram
4. Draw and explain phases of SDLC.
5. Identify entities and establish proper relationship among them for the Hospital management system.
