

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF SCIENCE (M.Sc) in COMPUTER APPLICATIONS
EXAMINATION : JUNE / JULY - 2022
SEMESTER - II
Sub: Advanced Software Engineering (MSC-204-19)

Date : 04/07/2022

Total Marks : 60

Time: 2.00 pm to 04.30 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 diagrams wherever necessary.
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Q.1 Answer the following in 2-3lines. (Any 5) (10)

1. What is Software engineering? State the phases of system development lifecycle.
2. What all types of relationships make occur between 2 entities? (E-R Diagram entities)
3. Explain the concept of message passing in case of object oriented database design.
4. Why is testing an important phase in SDLC?
5. What is the difference between an E-R diagram and a Class diagram?
6. What are advantages of prototyping data model?
7. What are the characteristics of good software?

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

1. Explain what are a decision tree and a decision table with an example.
2. What are functional requirements and non functional requirements?
3. Explain any two fact finding techniques used in requirement analysis phase of SDLC.
4. Explain the different types of relationships that may exist between Things in UML.
5. Explain difference between Waterfall model and Spiral model.
6. What is a functional decomposition diagram? Give an example.

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

1. Explain different phases of SDLC.
 2. Explain characteristics of good System requirement specification.
 3. Draw a Data Flow diagram for hospital management system.
 4. What are different types of diagrams used in UML?
 5. Draw an Entity Relationship diagram for Hotel management system.
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