

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF SCIENCE (M.Sc) in COMPUTER APPLICATIONS
EXAMINATION : DECEMBER - 2024
SEMESTER - I
Sub : Software Engineering (MSC24 -105)

Date : 30/12/2024

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. What is UML?
2. Explain the concept of aggregation used in UML.
3. Define use case diagram.
4. When fork- and – join are used in activity diagram.
5. What is CLD?
6. Define FDD.
7. What is software engineering?

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

1. Draw a DFD for Cafe Management System.
2. Write a note on Waterfall Model.
3. Explain relationships used in UML.
4. State difference between deployment diagram and component diagram.
5. Draw and explain class diagram for cab booking system using Uber cabs.
6. What are the characteristics of software?

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

1. Draw class diagram and sequence diagram for student admission process.
 2. Draw Class diagram and Use case diagram for online shopping system.
 3. Explain waterfall model using suitable diagram.
 4. Draw DFD and CLD for Fraud app detection software.
 5. Draw Use case and Class diagram for Mobile application used for social networking (Instagram), which searches specified person/ organization or group and chats as well as images.
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