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MASTER OF COMPUTER APPLICATIONS
EXAMINATION : DECEMBER - 2023
SEMESTER - I
Sub : Software Engineering & Testing   (MCA- 103-22)

Date :22/12/2023   **Total Marks : 60**   **Time: 2.00 pm To 4.30 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 DSS and ESS.

   2. What is System testing?

   3. Define QA.

   4. What is state chart diagram?

   5. Define node.

   6. What is SDLC?

   7. What is ER diagram?

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

   1. What is difference between class diagram and object diagram?

   2. Distinguish between verification & validation.

   3. Explain requirement gathering in SDLC.

   4. Explain formal and informal reviews?

   5. Describe PDCA with diagram.

   6. Difference between probabilistic and deterministic system

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

   1. What are the phases encompassed in the waterfall model?

   2. Discuss various systems related to management levels.

   3. Explain Black box and White box testing with example.

   4. Mention the advantage and disadvantage of spiral model.

   5. Describe software inspections with suitable example.