MASTER OF COMPUTER APPLICATION
Third Semester
SOFTWARE ENGINEERING
(MCA - 302)

Duration: 3Hrs.

Full Marks: 70

Part-A (Objective) =20
Part-B (Descriptive) =50

(PART-B: Descriptive)

Duration: 2 hrs. 40 mins.

Marks: 50

Answer any *four* from *Question no.* 2 to 8
Question no. 1 is compulsory.

1. What do you understand by white box testing & black box testing? Differentiate between them. (7+3=10)

2. The basis path testing comes under which type of testing? Explain the types of calculating cyclomatic complexity with the help of an example. (2+8=10)

3. What is SDLC? Discuss the incremental model. (3+7=10)

4. Discuss the various key process areas of CMM at various maturity levels. (10)

5. Discuss the objective of modular software design. What do you mean by the terms cohesion & coupling in context of software design? (5+5=10)

6. Write the rules for data flow diagram. Draw the context diagram for 'Library Automation System'. (6+4=10)

7. Write the characteristics of a good SRS document. Define Basic COCOMO model. (5+5=10)

8. Represent the following conditions with Decision Table and Decision Tree.

(5+5=10)

A Library Membership System should support the following options: new member, renewal and cancel membership. When new member selected, software ask for member details. If the entered details are correct, system generates membership recoi and print a bill for annual charge. If the renewal option is chosen then LMS ask for membership id. If the id is valid then update the expiry date and print the bill for annual charge. If the cancel membership is selected and the valid member id entered, then membership is cancelled and a cheque for the balance amount due to th member is printed and his membership record deleted.

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M. COM
Third Semester
INFORMATION TECHNOLOGY & BUSINESS
(MCM - 302)

Duration: 20 minutes   **Marks – 20**

(PART A - Objective Type)

I. Choose the correct answer: **1×20=20**

1. A System as defined by Zeleny constitutes all of the following, but not?
   a) Malware   b) Software
   c) Brain ware   d) Hardware

2. Components of a decision support system are the following, but not?
   a) Data Management Sub System   b) Software Management Sub System
   c) User Interface Management System   d) Knowledge Management Sub System

3. OLTP stands for _____

4. MAN stands for
   a) Metro Area Network   b) Management Area Networks
   c) Multiple Area Networks   d) Modern Area Networks

5. In B2B, C2C and C2A, 'C' stands for:
   a) Client   b) Custodian
   c) Customer   d) Consumer

6. Model Base is a component of:
   a) MBSS   b) MMSS
   c) MBMS   d) MDMS

7. Which of the following is not a process of MIS design?
   a) SDLC   b) Iterative
   c) Analytical   d) Prototyping

8. OLAP stands for _____

9. Acronym PODSCORB stands for _____

_____

10. Floor level management of an organization are associated with which of the following categories of Information Systems:
    a) TPS   b) OAS
    c) Both 'a' & 'b'   d) Neither 'a' nor 'b'

11. MS Office is an example of:
   a) Application Software   b) Model Base
   c) neither a nor b   d) Both a and b

12. Which of the following is not an example of e-Payment system?
   a) e-Cash   b) Smart Cards
   c) Cheques   d) ATM Card

13. Decision making process does not involve the following:
   a) Intelligent Phase   b) Integration Phase
   c) Design Phase   d) Choice Phase

14. Data + _____ + _____ = Information

15. "Controlling" as a management function involves:
   1. Initiating Corrective Measures.
   2. Establish Standards.
   3. Measure Current Performance and Compare the same with Established Standards.

   Answer-
   a) 1→2→3   b) 2→3→1   c) 3→2→1   d) 2→1→3

16. 80:20 rule is also known as:
   a) Pareto's Law   b) Law of Mal-distribution
   c) Both 'a' & 'b'   d) Neither 'a' nor 'b'

17. Query Facility is seen in:
   a) DMSS   b) MMSS
   c) UIMS   d) KMSS

18. Data Dictionary is seen in:
   a) DMSS   b) MMSS
   c) UIMS   d) KMSS

19. Which of the following is not a form of e-Commerce?
   a) B2B   b) C2C
   c) B2D   d) A2C

20. _____ + Insight = _____

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