



Second Term Exam-2072
Subject: Computer Science

Grade: XII
Time: 3:00 hrs.

F.M.:75
P.M.:30

SET A
Group A

Attempt **all** questions **[10×4=40]**

1. a. Define conditional operator. Write a program to find greatest between two numbers using condition operator. [2+3]
- b. Differentiate between break and continue statements with examples. [5]
2. What is recursion? Write a recursive program to print Fibonacci series up to n. [4+6]
3. What is an array? List advantages and disadvantages of array. Write a C program to calculate sum of two matrices with size 2x2. [2+3+5]
4. Define structure variable with members: sid, name and age of 100 students and write a program which takes records of the students and prints the records in alphabetical order on the basis of age. [10]

Group B

Attempt **all** questions **[5×7=35]**

5. What is spiral model? Explain all the stages of spiral model with suitable diagram. [2+3]
6. Explain the importance of testing process and verification process in SDLC. [5]
7. Explain the terms: DB, DBMS and RDBMS. [5]
8. Define data security and data integrity. Also, explain three types of data integrity constraints. [2+3]
9. What is transmission media? Explain various types of guided transmission media. [1+4]
10. Write short notes: [2.5+2.5]
 - SQL
 - Switch
11. Explain the types of networks on the basis of architecture. [5]



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SET B
Group A

Attempt **all** questions **[4×10=40]**

1. a. What is unary operator? Explain the prefix and postfix operation of unary operator. [2+3]
- b. Differentiate between looping and branching statements. [5]
2. What are the differences between user defined function and library function? Write recursive c program to calculate factorial of given number. [4+6]
3. What is string? Sort the given set of strings in alphabetical order. [2+8]
4. What is nested structure? Also, differentiate between structure and union. [4+6]

Group B

Attempt **all** questions **[7×5=35]**

5. What is prototype model? Explain all the stages of prototype model with suitable diagram. [1+4]
6. Explain the importance of implementation stage and maintenance stage of SDLC. [2.5+2.5]
7. Differentiate between distributed database and centralized database systems. [5]
8. What is hierarchical database model? Explain the merits and demerits the model. [2+3]
9. What is OSI reference model? Explain the seven layers of OSI reference model. [1+4]
10. Explain various types of networks on the basis of size. [5]
11. Write short notes: [2.5+2.5]
 - Data Dictionary
 - Bridge