



Pre-Board -2072

Subject: Computer Science

F.M.: 75

P.M.: 27.5

(SET A)

Group A

Attempt **any four** questions

[4×10=40]

1. What is looping statement? Describe while, do while and for loop with appropriate examples. **[1+9]**
2. What is an array? Write a C program to sort the given numbers in ascending order. **[4+6]**
3. Define a string. Explain any four string manipulation functions. **[2+8]**
4. What are the differences between user defined function and library function? Write C program to print the Fibonacci series using recursive function. **[4+6]**
5. What is data file? Write a program which stores name, department and age of employees in a file named "employee.dat" and display the records on monitor. **[2+8]**

Group B

Attempt **any seven** questions

[7×5=35]

6. Differentiate between array and pointer. **[5]**
7. Explain different stages of system development life cycle with clean diagram. **[5]**
8. What is relational database model? List out the advantages and disadvantages of relational database model. **[1+4]**
9. What is topology? Describe ring topology and star topology with merits and demerits. **[2+3]**
10. Describe OSI reference model.
11. Explain inheritance and polymorphism features of OOP with examples. **[2.5+2.5]**
12. What is AI? Explain the applications of AI. **[2+3]**
13. What is multimedia? Explain the major components of multimedia. **[5]**
14. Write short notes on: **[2.5+2.5]**
 - a) E-Learning
 - b) Cyber law



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Group A

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1. What is branching statement? Describe if else, if else if, nested if else and switch statements with appropriate examples. **[2+8]**
2. Describe advantages and disadvantages of array. Write a program to calculate sum of two matrices with size 2×2. **[2+8]**
3. What is recursion? Write a C program to calculate factorial of given number using recursive function. **[4+6]**
4. What is pointer? Describe the terms: call by value and call by reference with appropriate examples. **[4+6]**
5. What are file opening modes of data file? Explain any four file manipulation functions with appropriate examples. **[2+8]**

Group B

Attempt **any seven** questions

[7×5=35]

6. Differentiate between structure and union. **[5]**
7. What is information system? Describe the various types of information system. **[1+4]**
8. Describe the terms: SQL and data dictionary. **[2.5+2.5]**
9. What is hierarchical database model? List out the advantages and disadvantages of hierarchical database model. **[1+4]**
10. Explain various types of computer network on the basis of size. **[5]**
11. What is OOP? Differentiate between structured programming and object oriented programming. **[1+4]**
12. What is cyber crime? Explain various forms of cyber crimes. **[2+3]**
13. What is e-commerce? Describe advantages and disadvantages of e-commerce. **[2+3]**
14. Write short notes on: **[2.5+2.5]**
 - a) Virtual Reality
 - b) Normalization