

Examination, December-2024

COMPUTER FUNDAMENTALS AND PROBLEM SOLVING USING C

Paper : 23BCA401DS02

Time allowed : 3 hours]

[Maximum marks : 50

Note : Question No. 1 is compulsory. Attempt five questions in total by selecting one question from each unit.

1. (a) Compare RAM with ROM. 2
- (b) What is debugging in programming? 2
- (c) Differentiate between constant and variables in C with example. 2
- (d) Compare i++ with ++i. 2
- (e) Define operating system and mention various functions of operating system. 2

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Unit-I

2. What do you mean by computer networks? Discuss various network topologies with their pros and cons. 10
3. Explain the Block diagram of the computer system and explain the functions of each unit. Discuss classification of computer systems. 10

Unit-II

4. (a) Explain various symbols used in Flowcharts. Draw a flowchart to find the given number is odd or even. 5
- (b) What is an algorithm? Write an algorithm to find out smallest of 3 numbers. 5
5. (a) Explain the following : 5
printf(), scanf(), getch(), main() and getchar()
- (b) Write a program in C to find out simple interest. 5

Unit-III

6. Compare if-else and switch () statements. Write a program to print the months of year using switch () statement and if statement. 10
7. (a) Write a program in C to find out if given No. is prime or not. 5
- (b) Explain the syntax of all types of loops with examples. 5

Unit-IV

8. What is a user defined function? What are its different elements? What are different methods of passing arguments to functions? Discuss with an examples. 10
9. (a) What is an array? Write a program to take 5 values from the user and store them in an array. 5
- (b) Discuss various string manipulation functions with examples. 5