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06CCP13/23

First/Second Semester B.E. Degree Examination, Dec. 07 / Jan. 08
Computer Concepts and 'C' Programming

Time: 3 hrs.

Max. Marks:100

Note : Answer any FIVE full questions, choosing two questions from each part A and part B .

PART - A

- 1 a. Explain the functional organization of a digital computer. (10 Marks)
b. Discuss the operation of – i) Digital pen ii) Touch screen iii) Game controller. (06 Marks)
c. Classify the following printers into impact /non impact types – i) Dot matrix ii) Laser jet iii) Line printers iv) Daisy wheel. (04 Marks)
- 2 a. What are the differences between primary memory and secondary memory? (06 Marks)
b. Explain briefly about address bus and data bus. (04 Marks)
c. What are the categories of storage devices based on the technology? (10 Marks)
- 3 a. Briefly explain the classification of operating systems with examples for each. (10 Marks)
b. What are the primary functions of operating system? (06 Marks)
c. What are the various benefits of using a computer network? (04 Marks)
- 4 a. What are the advantages of writing algorithm? (06 Marks)
b. Write an algorithm and flowchart to find whether a given number is prime or not. (10 Marks)
c. What are keywords? Explain any three keywords available in 'C'. (04 Marks)

PART - B

- 5 a. Explain the following operators with examples.
i) Logical operators ii) Relational operators iii) Conditional operators. (06 Marks)
b. What would be the value of a after the execution of the following expression. Assume the initial value of a = 5. Neatly mention the steps.
i) $a += (a++) + (++a)$, ii) $a = (--a) - (a--)$. (08 Marks)
c. Give the basic structure of a C – program and write a C – program to find the largest of three given integer values. (06 Marks)
- 6 a. Write syntax of the followings – i) If – statement ii) The nested if – statement iii) The else – if ladder statement iv) Switch statement. (08 Marks)
b. Write a C – program to generate the prime numbers in the range n1 to n2. (06 Marks)
c. What is the difference between break and continue statement? Give the example in each. (06 Marks)
- 7 a. Explain the declaration of single dimension array and two dimension array. (04 Marks)
b. Write a C – program to input N integer numbers into a single dimension array. Sort them in ascending order using Bubble sort technique. Print both the given array and sorted array with suitable headings. (08 Marks)
c. Explain the categories of functions. (08 Marks)
- 8 a. Write C user defined functions
i) To input N real numbers in to a single dimension array.
ii) Compute their mean
iii) Compute their variance
iv) Compute their standard deviation
Using these functions, write a C program to input N real numbers into a single dimension array, and compute their mean, variance, and standard deviation. Output the computed results with suitable headings. (10 Marks)
b. Write C user defined functions :
i) To input N integer numbers in to single dimension array.
ii) To sort the integer numbers in ascending order using bubble sort technique.
iii) To print the array elements.
Using these functions write a C–program to input N integer numbers into a single dimension array, sort them in ascending order, and print both the given array and the sorted array with suitable headings. (10 Marks)
