

End Semester Examinations - 2015-16 Even Semester - May 2016

14CS2068 Essentials of Programming

Set B

Time : 3 hrs
Total Marks: 100

1. a. Explain how internet plays a major role in the modern field of information technology. (10)
b. Write a C program to solve a quadratic equation. (10)

(OR)

OR

2. a. Write a C program to demonstrate the various logical and bitwise operators. (10)
b. Discuss about the various steps involved in analysis of algorithm. (10)

3. a. Admission to a professional course in subject to the following conditions
i) Marks in Maths ≥ 60
ii) Marks in Physics ≥ 50
iii) Marks in chemistry ≥ 40
iv) Total in all the three subjects ≥ 200 (or) Total in Maths and Physics ≥ 150
Given the marks of three subjects, write a program to process the applications to list the eligible candidates using switch statement. (10)
b. Explain about the floating point and integer data type in C. (5)
c. Compare and contrast the various data types in C. (5)

(OR)

OR

4. a. Write a C program to print the multiplication table of the number entered by the user. Draw the flow chart for the process. (15)
b. Write a C language program to check whether the given pair of numbers is amicable pair or not. (5)
5. a. A 5-digit positive integer is entered through the keyboard, write a function to calculate sum of digits of the 5-digit number i) Without using recursion ii) Using recursion (10)
b. Explain about the concept of call by value and call by reference with examples. (10)

(OR)

OR

6. a. Write a C program to perform matrix addition, subtraction and multiplication using a 2-dimensional array. (10)
b. Explain how to pass array elements to a function with example. (10)
7. a. Define a structure Student that consists of the following members: (10)
Reg-no, name, marks in 3 subjects
i) To print maximum mark in each subject along with name of the student
ii) To calculate total and average and print Rank wise list
b. Explain about the various storage classes in C with examples. (10)

(OR)

OR

8. a. Write a program to find whether the given string is palindrome or not. (5)
b. Write a C program to demonstrate the various string operations in C. (15)

9. **Compulsory:**

- a. Explain about the various formatted console I/O functions with example. (10)
b. Write a C program to open a file and count the number of characters in the file. (10)

Wishing you All the Best
