

Student Id.: _____

Navrachana University
End-Semester Examination
FYBCA/FYMScIT (Sem-I) [Autumn, 2017-18]
CS102: Programming Concepts and Algorithms
CS123: Programming Basics

Date: 22-Nov-2017, Wednesday
Time: 10:30 AM – 12:30 PM

Total Marks: 40
Weightage: 40%

Que. 1. Attempt any six

[12]

- A. Differentiate between gets() & scanf() functions.
- B. For declaration as int a[10]; the last element is stored at a[9]. Is it true? Justify your answer.
- C. Differentiate between call by value & call by reference.
- D. Differentiate between formal & actual arguments
- E. Differentiate between array & structure
- F. Justify. All strings are character arrays but all character arrays are not strings.
- G. What is the output of the following scriptlet,

```
int p[]={1,3,4,5,9}
int *ptr;
ptr=p;
ptr = ptr + 2;
printf("%d", *ptr);
```

Que. 2. Attempt any three

[12]

- A. Write a short note on array.
- B. Explain any four string functions with example.
- C. Explain pointers in brief.
- D. Write a C program to count the frequency of characters in the string, eg. In the string "gujarat", character 'a' has a frequency of 2.

Que. 3. Attempt any two

[16]

- A. Write a short note on structure data type.
- B. Write a short note on functions.
- C. Write a C program to check whether a string is a palindrome or not.

-----End of Question Paper-----