

GANPAT UNIVERSITY
B. TECH. SEM. – I (CE/IT/EC/BM&I)
REGULAR EXAMINATION NOV-DEC 2012
CE 101: COMPUTER PROGRAMMING

Time: 3 Hours]

[Total Marks: 70

Instructions:

1. Figures to the right indicate full marks.
2. Each section should be written in a separate answer book.
3. Be precise and to the point in your answer.

SECTION-I

- Q.1** (a) What is Flowchart? Draw the flow chart of compilation process. (5)
 (b) List out the C tokens & Explain any three C token with suitable examples. (5)
 (c) Explain the following terms: 1) Compiler 2) Editor (2)

OR

- Q.1** (a) Discuss the need of programming language & Give the features of C. (5)
 (b) List the various data types of C with its size (bytes) and format specifies. (5)
 (c) Give the difference the between integer constant & integer variable. (2)

- Q.2** (a) Explain Switch statement with its syntax, flowchart and program. (6)
 (b) Discuss the Postfix and Prefix with proper examples. (5)

OR

- Q.2** (a) Explain else..if ladder with its syntax, flowchart and program. (6)
 (b) Discuss getch (), getche (), getchar (), putchar () & clrscr () with proper example. (5)

- Q.3** (a) Write a 'C' program that will read the value of x and evaluate the following function. (6)

$$y=1 \text{ (if } x > 0)$$

$$y=0 \text{ (if } x = 0)$$

$$y=-1 \text{ (if } x < 0)$$

Using,

- (a) Nested If structure.
- (b) Else if statements,
- (c) Conditional operator.

- (b) Write a 'C' program to display the prime numbers between 1 to 100. (6)

SECTION-II

Q.4 (a) Write a program to display the starts as shown below (5)

1
22
333
4444
55555

- (b) Define array & Discuss 2-D array with example. (5)
(c) What is the need of user-defined functions? (2)

OR

Q.4 (a) Write a 'C' program to sort any five integer elements into descending order. (5)
(b) Explain the difference between Break & Continue in loops with Example. (5)
(c) Define the following terms: 1) Scope 2) Lifetime. (2)

Q.5 (a) Explain Storage class with suitable examples. (6)
(b) Write a 'C' program to reverse the given string without strrev () function. (5)

OR

Q.5 (a) Write a user defined function to find out the factorial of given number. (6)
(b) Define Structure & Write a 'C' program using structure to read & print the following data of 3 students on the screen : (5)

- [a.] Roll no.
- [b.] Student name
- [c.] Branch
- [d.] Mobile number

Q.6 (a) Explain the following String functions : (4)

i) strrev() ii) strcat() iii) strncpy() iv)strupr()

(b) Fill in the following blanks : (4)

- i) The keyword _____ can be used to create data type identifier.
- ii) The operator _____ cannot be used with real operands.
- iii) The ternary statement could be easily coded with _____ statement.
- iv) The printf function may be replaced by _____ function to printing a string.

(c) Give the output of following with proper justification. (4)

```
i.) void main()
{
    int n;
    n=sizeof(3.14);
    printf("%d",n);
}
```

```
ii.) void main()
{
    int i=-1,j=-1,k=0,p=2,m;
    m=i++&&j++&&k++||p++;
    printf("%d %d %d %d %d",i,j,k,p,m);
}
```

END OF PAPER