

B.Com. DEGREE (C.B.C.S.S.) EXAMINATION, OCTOBER 2012**Fifth Semester****PROGRAMMING IN C LANGUAGE**

(Common for Model-II B.Com Optional Stream Computer Applications, UGC Sponsored
B.Com Computer Applications and UGC Sponsored B.Com. (OM and SP))

Time : Three Hours

Maximum Weight : 25

Section A*Answer all questions.**Each bunch of four questions carries a weight of 1.***I. Choose the correct answer :**

1. _____ is an entry controlled loop.
(a) Do-While. (b) For.
(c) While. (d) If-else.
2. _____ is the format code for reading a floating point value in C.
(a) %fp. (b) %d.
(c) %f. (d) %c.
3. Literal means _____.
(a) A string. (b) A string constant.
(c) An alphabet. (d) A character.
4. Consider the following declaration
int a, *b = &a, **c = &b.
The following program fragment
a = 4;
**c = 5;
(a) Does not change the value of a.
(b) Assigns address of c to a.
(c) Assigns the value of b to a.
(d) Assigns 5 to a.

II. Fill in blanks :

5. EOF stands for _____.
6. Every program in a C program must end with a _____.
7. _____ operator gives remainder during division.
8. _____ function joins two strings together.

Turn over

III. State whether the following statements are True or False :

9. A pointer can never be subtracted from another pointer.
10. One if can have more than one else clause.
11. Every function should have a return statement.
12. Syntax errors will be detected by the compiler.

IV. Match the following :

- | | | |
|-------------------------|---|---------|
| 13. Character functions | — | stdio.h |
| 14. Output functions | — | && |
| 15. Bitwise AND | — | ctype.h |
| 16. Logical AND | — | & |

(4 × 1 = 4)

Section B

Answer any five questions.

Each question carries a weight of 1.

17. What is a pointer ? How is it initialized ?
18. Explain different types of constants in C with example.
19. List out the advantages and limitations of flowcharts.
20. Which are the different modes used for opening a file ?
21. What is meant by array of structures ?
22. Write a program to find whether a no. is prime or not.
23. What is the difference between a constant and a variable ?
24. Determine the output of the program :

```
main ( )
{ int x = 10;
  int y = 20;
  int p,q;
  p = prod (x, y)
  q = prod (p, prod (x, 2));
  printf ("%d %d\n", p,q);
}

prod (a, b)
{
  int a, b;
  return (a * b);
}
```

(5 × 1 = 5)

Section C

*Answer any four questions.
Each question carries a weight of 2.*

25. Differentiate between :
 - (a) Call by Reference and Call by Value.
 - (b) Global and Local variables.
26. Explain the different types of functions in C.
27. What is an array ? Explain different types of arrays with example.
28. Find errors, if any, in the following statements and rectify them. Give reason
 - (a) $a = b ++ - c * 2$
 - (b) $p* = x/y.$
29. Write a program to copy the contents of one file into another.
30. Write a C program to read data from the keyboards, write it into a file called INPUT, again read the same data from the INPUT file, and display it on the screen.

(4 × 2 = 8)

Section D

*Answer any two questions.
Each question carries a weight of 4.*

31. Explain briefly algorithm and flowchart. Draw a flowchart along with algorithm to check whether a given number is odd or even. If it is odd, add 5 to that number else subtract 5 from that number.
32. Explain different looping statements in C.
33. (a) Write a program to print the multiplication table.
(b) Write a program using function to generate and print the first 'n' Fibonacci numbers.

(2 × 4 = 8)