BRAINWARE UNIVERSITY

Course – BAMW

Computer Science (BMWG101)

(Semester – 1)

Time allotted: 3 Hours   **Full Marks : 70**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group –A

(Multiple Choice Type Question)

1. Choose the correct alternatives for the following: 1 x 10 = 10

   i.   Which of the following declaration is not a valid declaration?

   a) int 3x   b) int x2x   c) int x2   d) int x

   ii. Which of the following is a bitwise operator?

   a) &&   b) <   c) %   d) >>

   iii. What will be the value of a and b?

   int a = 1, b;

   b = ++a;

   printf("%d,%d", a, b);

   a) 1,2   b) 2,2   c) 2,1   d) 1,2

   iv. Which of the following operator takes only integer operands?

   a) +   b) %   c) /   d) *

   v.   Which of the following statement is not true for an array?

   a) allocates contiguous memory location

   b) index position starts from 0

   c) contains heterogeneous data values

   d) capable of storing multiple values at a time

vi. The output of the following code is

        int a = -6, b = 2;

        if(a/b)

        printf("Hello");

         else

        printf("Hi");

  a) Hello   b) Hi   c) Error   d) None of these

vii. Which one is correct output?

        char arr[] = "Computer";

        printf("%d", strlen(arr));

  a) 7   b) 8   c) 9   d) 16

viii. How many keywords are there in C?

  a) 35   b) 32   c) 42   d) None of these

ix. A function should return

  a) single value   b) multiple value   c) both a) and b)   d) None of these

x. What will be the following output?

        int i=2;

        switch(i)

        {

                case 1: printf("Hello");

                case 2: printf("Welcome");

                case 3: printf("to");

                default: printf("Brainware University");

        }

  a) Hello   b) Welcome   c) Brainware University   d) None of these

Group – B

(Short Answer Type Question)

Answer **any three** of the following: 3 x 5 = 15

2. Write a comparative study among while, do-while and for loop.   5

3. What is the difference between 'break' and 'continue' statement. Explain with example.   5

4. Explain with example that what do you mean by operator precedence and associativity.   5

5. Write a C program to swap (exchange) the values between two variables.   5

6. Define the switch case statement with example.   5

Group – C

(Long Answer Type Question)

Answer **any three** of the following: 3 x 15 = 45

7. a) Discuss about various data types in C.

   b) Explain with example pre-increment and post-increment operator.

   c) Write a C program to check whether a number is palindrome or not.   5+5+5

8. a) Discuss about the syntax of for loop.

   b) What do you mean by 'entry controlled loop' and 'exit controlled loop'?

   c) Write a C program to print the following pattern:

   1   1   1   1

   1   1   1   1

   1   1   1   1

   1   1   1   1   3+5+7

9. a) What is array? Write some features of array.

   b) How to declare an integer and float array?

   c) Write a C program to find the biggest element from an array of 10 elements.   5+4+6

10. a) Discuss about the library functions used to handle string in C.

b) Write a C program to check whether a string is palindrome or not.   6+9

11. Write short notes on: (Any three)   5 x 3

a) Standard input output library function

b) Macro Substitution

c) C function

d) Array

e) Bitwise Operator