EXAMINATION PAPER

FACULTY	:	**COMPUTER SCIENCE AND MULTIMEDIA**
COURSE	:	**BACHELOR OF INFORMATION TECHNOLOGY (HONS)**
YEAR/ SEMESTER	:	**FIRST YEAR / SEMESTER ONE**
MODULE TITLE	:	**C-PROGRAMMING**
CODE	:	**BIT 115**
DATE	:	**APRIL 12- 2018, THURSDAY**
TIME ALLOWED	:	**3 HOURS**
START	:	**1:00 PM** **FINISH** : **4:00 PM**

Instruction to candidates

1. This question paper has THREE (3) Sections.

2. Answer **ALL** questions in Section A, MCQ.

3. Answer **5** questions in Section B, MSAQ.

4. Answer **2** questions in Section C, MEQ.

5. No scripts or answer sheets are to be taken out of the Examination Hall.

6. For Section A, answer in the OMR form provided.

Do not open this question paper until instructed

Multiple Choice Questions   **(30*1=30)**

1. **Which of the following is NOT a correct c expression?**
   a. r=a+b;
   b. r=2*{l+b};
   c. r=l*b;
   d. All

2. **Which of the following is NOT a loop statement?**
   a. for
   b. while
   c. do while
   d. switch

3. **Which of the following format specifiers is used with string?**
   a. %d
   b. %s
   c. %f
   d. %ld

4. **Which of the following data type is also used to define string ?**
   a. char
   b. int
   c. float
   d. double

5. **Which of the following format specifier is for integer number?**
   a. %f
   b. %d
   c. %s
   d. %c

6. **What is the output of the following program?**

   a = 15;

   a++ ;

   p = a + 1;

   printf("%d", p);

   a. 15
   b. 16
   c. 17
   d. 18

7. **Which of the following is the output of the following program segment?**

   int i;

   for(i = 1; i<=50;i ++)

   { if(i%5==0)

   printf("\t %d",i); }

   a. 10, 20, 30,40,50
   b. 5, 10, 15,20,25,30,35,40,45,50
   c. 5, 15, 25,35,45
   d. 50

8. **Which of the given statements are true to display the strings "OCEAN"?**

   (i) puts("OCEAN");

   (ii) printf("OCEAN");

   (iii) printf(OCEAN)

   a. (i)
   b. (ii)
   c. (iii)
   d. (i) and (ii)

9. **Match the following:**

        (a) = =   (i) arithmetic operator

        (b) &   (ii) assignment operator

        (c) +   (iii) relational operator

        (d) =   (iv) address operator

a. a and ii, b and iii, c and iv, d and i
b. a and iii, b and iv, c and i, d and ii
c. a and ii, b and iv, c and iii, d and i
d. a and i, b and iii, c and iv, d and ii

10. **Which of the following are the true statements?**

(p) Every element in an array is of similar data types.

(q) Upper and lower cases really matters in C programming.

(r) A union reserves memory for all of its members.

(s) Braces are optional when there is a single statement inside the if statement.

a. p, r and s
b. p, q, and r
c. p, q, and s
d. All the mentioned

11. **A C variable cannot start with:**
a. A number
b. A special symbol other than underscore
c. Both (a) and (b)
d. An alphabet

12. **C programs are converted into machine language with the help of _____.**
a. An editor
b. A compiler
c. An operating system
d. None of the above

13. What will be printed after execution of the following program code?

```
main()
{
  printf("\\nab");
 printf("\\bsi");
  printf("\\rha");
 }
```

  a. Absiha
  b. Hasi
  c. Nab
  d. None of the above

14. "My salary was increased by 15%" Select the statement, which will EXACTLY reproduce the line of text above.

  a. printf("My salary was increased by 15/%!");
  b. printf("My salary was increased by 15%!");
  c. printf("My salary was increased by 15'%'!");
  d. printf("My salary was increased by 15%%!");

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

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

16. Determine output of following program:

```
void main()
{
    int i=10;
    i = !i>14;
    printf("i=%d", i);
}
```

  a. 10

  b. 14

  c. 0

  d. 1

17. **Which one is the false statement?**
    a. An array is a collection of variables of same data types
    b. All elements of array are stored in the contiguous memory locations.
    c. The size of array must be a constant integral value
    d. The array index starts from 1.

18. **Which is the only function all C programs must contain?**
    a. printf()
    b. main()
    c. scanf()
    d. gets()

19. **Which of the following keyword is used to come out of a loop only for that iteration?**
    a. continue
    b. break
    c. return
    d. exit

20. **Which of the following shows the correct hierarchy of arithmetic operations in C?**
    a. / + * −
    b. * − / +
    c. + − / *
    d. * / + −

21. **For the array declaration below, which of the given assigns the value for the third array index?**
      intnum[4];
    a. num[0]=5;
    b. num[1]=5;
    c. num[2]=5;
    d. num[3]=5;

22. **Pointer actually stores _____of another variable.**
    a. value
    b. address
    c. data size
    d. none of the mentioned

23. **Pointer variable is declared using preceding _____ sign.**
    a. %
    b. &
    c. *
    d. ^

24. **Address stored in the pointer variable is of type of _____.**
    a. integer
    b. floating
    c. array
    d. character

25. **Who is father of C Language?**
    a. Bjarne Stroustrup
    b. James A. Gosling
    c. Dennis Ritchie
    d. Dr. E.F. Codd

26. **Which of the following is used for single line comment?**
    a. \n
    b. \t
    c. \a
    d. \\

27. **C was primarily developed a:**
    a. System programming language
    b. General purpose language
    c. Data processing language
    d. None of the above

28. **Which of the following statement is used to terminate the C statements?**
    a. ;
    b. ,
    c. :
    d. $

29. Which of the following comments about union are true?
   a. Union is a structure whose members share the same storage area
   b. Size allocated for union is the size of its member needing the maximum storage
   c. Only one of the members of union can be assigned a value at a particular time
   d. All of above

30. Passing address of the variable to a function is known as _____.
   a. passing by value method
   b. passing by reference method
   c. passing by pointer method
   d. none of the mentioned

SECTION B
Short Answers Questions
Answer any five (5) questions out of eight (8) questions   (5*6=30)

1. Write a program to input any five numbers and find the   sum of these numbers.

2. Differentiate between for and do while loops**.**

3. Write a program to input and display the records of any ten employees using structure. Include the fields: Employee ID, Employee name and Employee address.

4. Explain array. Write a program to generate Fibonacci series.(1+5)

5. Define string manipulation functions .Write a program to reverse a string using library function.(1+5)

6. Write a program to find factorial of a number.

7. Differentiate between union and structure.

8. Write a program to read 3 no. and display the greatest number.

SECTION C
Long Answer Questions
Attempt any two (2) questions out of three (3) questions. (2*20=40)

1. **a.** Define function. Write a program to generate the following output.(3+7)

   1
   12
   123
   1234
   12345

   b. Explain different type of operator used in C programming in details. (10)

2. Define pointer. Explain passing by value and passing by reference methods. Write two different programs to input radius and find its area and circumference using both methods passing by value and passing by reference.(2+4+14)

3. **a**. Define recursive function. Write a program to print "Hello " 'n' times using recursive function (3+7)

   b. List the different features of C programming. Write programs to input any characters in a file and read the characters from the file using unformatted I/O functions. (6+14)

****BEST OF LUCK****