

SEM 2-3 (RC 07-08)

F.E. (Semester – II) (RC 2007 – 08) Examination, May/June 2018 INFORMATION TECHNOLOGY

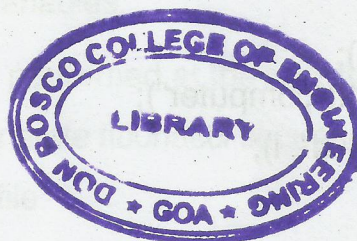
Duration : 3 Hours

Total Marks : 100

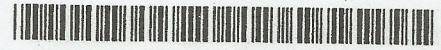
Instruction : Answer **any five** questions by selecting at least **one** question from **each** Module.

MODULE – I

1. a) Explain the following : 5
 - 1) Central processing unit.
 - 2) Control unit.
 - 3) Arithmetic and logic unit.
 - 4) Memory
 - 5) Registers.
- b) Write a short note on CD-ROM. 4
- c) Define any five characteristics of monitors. 5
- d) Explain multi-user, multi-processing and real-time operating systems. 6
2. a) State various advantages and disadvantages of Disk Operating System (DOS). 3
- b) Define topology. Explain briefly any one of the topology. 5
- c) Explain URL with an example. 5
- d) Explain electronic mail. 5
- e) Explain WWW. 2



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MODULE – II

3. a) What is DBMS ? Explain any two database models. 7
- b) Explain the following characteristics of the data present in the data. 7
- 1) Shared
 - 2) Persistence
 - 3) Security
 - 4) Consistency
 - 5) Non-redundancy
 - 6) Validity/Integrity.
- c) What is an assembler, compiler and a interpreter ? 6
4. a) Define and explain algorithm and flowchart. 6
- b) Write an algorithm and draw a flowchart to find sum of even and odd n between 1 to N. 7
- c) Write an algorithm and draw a flowchart to generate required number. 7

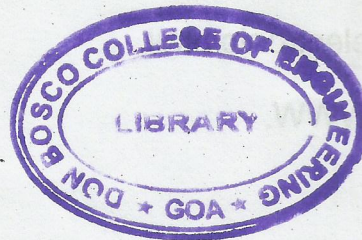
MODULE – III

5. a) Explain with a flowchart the process of compiling and running a C program. 5
- b) What are different syntax rules for Identifiers ? 5
- c) What is exam ? Explain with an example. 5
- d) Evaluate the following expressions :
 $x_1 = (-b + \sqrt{b*b - 4 * a * c}) / (2 * a)$ assuming $a = 1$, $b = -5$ and $c = 6$. 5
6. a) Explain how input of integer numbers is performed in a C program. 4
- b) What is the output of the following codes ? (3×2=6)

```

i) # include < stdio.h >
   # include < conio.h >
   void main( )
   {
       int i;
       clrscr( );
       i = printf("computer");
       printf("%d", i);
   }

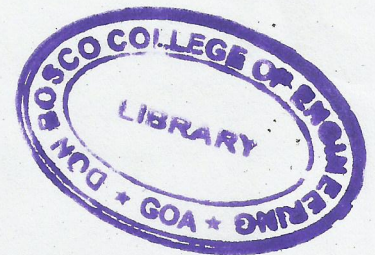
```





```
ii) # include < stdio.h >
    # include < conio.h >
    void main( )
    {
        int varl = 15, varz = 10, p, q;
        clrscr( );
        p = varl > 14;
        q = varl > 8 && varz == 8;
        printf("p = %d", P);
        printf("q=%d", q);
    }
```

```
iii) # include < stdio.h >
    # include < conio.h >
    void main ( )
    {
        int flt = 15, g = 10;
        printf ("%d\n",flt<<z);
        printf ("%d\n", flt%g);
    }
```



- c) Write a C program using switch-case construct to do the following : 6
When user enters 0 – calculate area of circle
When user enters 1 – calculate area of a square
- d) Write a C program using do while loop to accept a character from the user and print the corresponding ASCII value. 4

MODULE – IV

7. a) Explain the general syntax of the function definition. 5
b) Illustrate with an example nesting of functions. 5
c) What are the rules to be followed while passing 2D arrays to functions ? 5
d) Define scope, visibility and lifetime of variables. 5
8. a) Explain how initialization of 1D array is performed at the two stages. 7
b) Write a C program using functions to generate fibonacci sequence of n terms. 7
c) Illustrate reading from and writing to a file. 6