



SEM 2 – 3 (RC 07-08)

F.E. (Semester – II) (RC 2007-08) Examination, Nov./Dec. 2018 INFORMATION TECHNOLOGY

Duration : 3 Hours

Max. Marks : 100

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

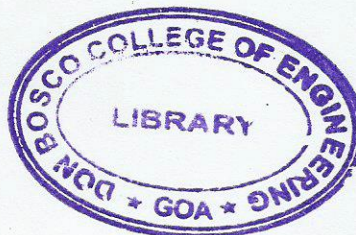
MODULE – I

1. a) Explain the mechanism of a floppy disk and provide a suitable diagram to support the answer. 5
- b) Explain the working of a CPU and memory with the help of diagram. 6
- c) Explain the characteristics of a monitor. 6
- d) Distinguish between DRAM and SRAM. 3
2. a) Give the use of the following DOS commands. 2
 - i) Dir
 - ii) MKdir.
- b) What is operating system ? List the functions of operating system. 4
- c) Write a note on the following network architecture 8
 - i) Peer to peer architecture.
 - ii) Client/server architecture.
- d) Write a short note on the following : 6
 - i) Spamming
 - ii) Web browser
 - iii) URL.

MODULE – II

3. a) What is DBMS ? What are the series provided by DBMS. 8
- b) Write an algorithm and draw a flowchart to reverse a number. 8
- c) Distinguish between a compiler and an interpreter. 4

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4. a) Describe the different types of high level languages. 6
 b) State and explain the characteristics of data present in a database. 8
 c) Write an algorithm and draw a flow chart to find the summation of n natural numbers. 6

MODULE – III

5. a) List and explain the basic datatypes used in C. 5
 b) Distinguish between ++i and i++. 5
 c) Give the output of the following programs : 5

i) main ()

```
{
    int x = 3, y = 4, z = 1 ;
    x += y ;
    y -= x ;
    z *= x ;
    print f( " % d % d % d ", x, y, z ) ;
}
```

ii) main ()

```
{
    int x, y ;
    x = 128 ;
    y = 32 ;
    x = x >> 1 ;
    y = y << 2 ;
    print f("x = % d and y = % d, x, y) ;
}
```

- d) Write a C program to generate the prime number series (1, 2, 3, 5 n terms). 5

6. a) Write a C program to generate the following pattern : 5

```
A B C D D C B A
A B C C B A
A B B A
A A
```





- b) Point out the error in the following program and correct it 5

```
void main ()  
{  
    int a, i ;  
    scanf ("% d ", a) ;  
    i = a > 5 ? 2 ? 3 ;  
    print (" i = % d/n ", i) ;  
}
```

- c) Write a menu driven program to implement a calculator. 5

- d) With the help of an example, explain what is the use of goto statement. 5

MODULE – IV

7. a) Distinguish between local and global variables with the help of an example. 4
- b) What is recursion ? Write a recursive function to find the factorial of a number. 6
- c) Write a C program to search for the desired element in an array of integers. 6
- d) What is an array ? Give the different ways of initialization of 1-D array. 4
8. a) Write a program to read data from keyboard until '\n' is encountered. Write this data to a file called "input.txt". Again read the same file and display the contents of the file on the screen. 8
- b) Explain the different modes of a file. 2
- c) Explain the following string handling function :
i) strcmp ()
ii) strcat (). 2
- d) Write a C program to copy the content of string S_1 to string S_2 without using the string handling functions. 8