XEV (H-II) – BCA (3)

# 2016

Time : 3 hours

Full Marks : 75

Candidates are required to give their answers in their own words as far as practicable.

The questions are of equal value.

Answer any five questions, selecting atleast two from each group.

## Group – A

1. What is computer network ? What are the advantages and disadvantages of computer network ? Explain.

2. What do you mean by guided and unguided media ? Describe about the different types of guided and unguided media.

3. What do you mean by data-transmission ? Explain about the different categories of data-transmission with example.

4. What is TCP/IP model ? Explain the functions and protocols of each layer ? Compare it with OSF model.

5. What are the different types of basic logic-gates ? Explain with the help of truth-tables and give an example of each gate.

## Group – B

6. What do you mean by variable and constant ? Explain about the different types of constant in C.

7. What is a function ? How is it decleared in C ? What is meant by call by reference and call by value ? Explain recursive function and list its merit and demerits with example.

8. (a) What do you mean by array ? Give their characteristics features.

   (b) Illustrate the initialization of a two dimensional array with example.

9. (a) What is a loop ? Why it is necessary in the program ? Write the syntax of the while loop ? Draw a control diagram of while-loop.

   (b) What will be the output of the following program when executed :

```
main ( )
{
int a =1, sum = 0;
clrscr ( );
while (a<=10)
```

```
{
printf ("%3d", a);
sum = sum + a;
a ++;
}
printf ("\n sum of 10 numbers : %d", sum
}
```

10. Write short notes on any **two** of the following

   (a) URL

   (b) ISP

   (c) Features of C

   (d) Single and multidimensional array

   (e) Duality principal

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