**BIEE-031**

# DIPLOMA IN ELECTRICAL ENGINEERING (DELVI) / ADVANCED LEVEL CERTIFICATE IN ELECTRICAL ENGINEERING (ACELVI)

☐☐771

## Term-End Examination

## June, 2014

### BIEE-031 : C - PROGRAMMING

*Time : 2 hours*                    *Maximum Marks : 70*

**Note :** *Attempt any **five** questions. Question no. **1** is **compulsory**. All questions carry equal marks.*

1.   Choose the correct answer :                    *7×2=14*

   (a)    Which of the following is Invalid variable ?
      (i)    sum
      (ii)   total
      (iii)  interest rate
      (iv)   name

   (b)    Programming language 'C' has been developed at
      (i)    Microsoft Corp., USA
      (ii)   AT & T Bell Labs, USA
      (iii)  Borland International, USA
      (iv)   IBM, USA

(c) Which of the following is the correct statement for checking condition in IF statement ?

(i) if (a = b)

(ii) if (a = = b)

(iii) if (a, b)

(iv) if (a b)

(d) How many elements will be there in A[10][5][2] ?

(i) 100

(ii) 50

(iii) 20

(iv) None of the above

(e) An array element need not occupy contiguous memory location. (True/False)

(f) Each group of Binary format represents one character. (True/False)

(g) A switch expression can be of any type. (True/False)

2. (a) What is meant by Basic data types ? Explain in brief. 7

(b) Compare the following : $3\frac{1}{2} + 3\frac{1}{2} = 7$

(i) do .... while and while loop.

(ii) break and continue statement.

**3.** (a) Write a program to print all the ASCII values and their equivalent characters using while loop. The ASCII value varies from 0 to 255.  *7*

(b) Write a program to print the following :  *7*

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

**4.** (a) Write a menu driven program which has following options :  *3+3+2=8*

(i) Factorial of a Number

(ii) Odd or Even Number

(iii) exit

Make use of switch statement.

(b) Write a program in 'C' to find sum of first N numbers.  *6*

**5.** (a) Write a program in 'C' to read and display the transpose of M × N matrix.  *7*

(b) What is primary key in database ? Why is it required ?  *7*

**6.** (a) Define data processing. Explain commercial and business data processing application.  *7*

(b) Write a program using conditional operators to determine whether a year entered through the keyboard is a leap year or not.  *7*

7. (a) Write a program in 'C' to reverse a five digit number which is input through the keyboard. 7

(b) Write a 'C' program to find out the sum of two matrices. 7

8. Write short notes on any *four* : $4 \times 3\frac{1}{2} = 14$

(a) Database Management System

(b) CAE

(c) CAM

(d) Importance of 'C' in Electrical Engineering

(e) Array

(f) Ternary operator

_____