Total No. of printed pages = 3

Co-301/CA/3rd Sem/2014/N

COMPUTER APPLICATION

Full Marks – 70

Pass Marks – 28

Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer question No.1 and any *four* from the rest.

1. Answer in brief : 2×5=10

   (a) What is a computer memory ?

   (b) Name four network devices.

   (c) What is an ISP ?

   (d) State the bases of the various number systems.

   (e) What is a machine language ?

2. (a) Define : software and hardware. What is a system software and application software ?

   (b) State the functions of O.S and briefly explain them. 8+7=15

[Turn over

3. (a) Differentiate between :

(i) LLL and HLL

(ii) Static RAM and dynamic RAM.

(b) What is a bit, byte and nibble ?

(c) Explain the functions of CPU.

3+3+3+6=15

4. (a) Convert the following :

(i) $123{\cdot}45_{10}$ into binary

(ii) 11011101_2 to hexadecimal

(iii) ABC_H into decimal

(iv) 0101110101_2 into octal.

(b) What do you mean by sign-magnitude representation ? Why 2's complement method is used in computer systems ?

(c) Perform $7_{10} - 5_{10}$ using 2's complement method. 8+4+3=15

5. (a) Define : LAN, MAN, WAN.

(b) What is a network topology ? State the different topologies used in networking.

(c) Why networking is necessary ? 6+4+5=15

6. (a) State and explain different transmission mediums in use.

(b) What is a language translator ? State the differences between compiler and interpreter. 10+5=15

7. Write short notes on any *three* : 3×5=15

(a) Operating system classification

(b) Number system

(c) Router

(d) Ring topology

(e) Flow chart.