Bachelor of Science (B.Sc.I.T.) Semester-I (C.B.S.) Examination

FUNDAMENTALS OF INFORMATION TECHNOLOGY

Paper—I

Time : Three Hours]   [Maximum Marks : 50

N.B. :— (1) **ALL** questions are compulsory and carry equal marks.

(2) Draw neat and labelled diagram wherever necessary.

EITHER

1. (a) Explain the basic components and functions of a digital computer with block diagram.   5

   (b) What do you mean by translator ? Explain different types of translators.   5

   OR

   (c) Write a short note on Number System.   5

   (d) Which number system is basically used in computer system ? Do as directed.   5

      (i) $(265)_{10} = (?)_8$

      (ii) $(AD1)_{16} = (?)_{10}$

   EITHER

2. (a) How is cache memory different from RAM ? Explain the different types of RAMs.   5

   (b) Differentiate between :   5

      (i)   Zip disk

      (ii) Pen drive

   OR

   (c) What is DVD ? Explain its working.   5

   (d) What is ROM ? Explain different types of ROMs.   5

   EITHER

3. (a) Explain the working of flat bed scanner.   5

   (b) Differentiate between MICR and OMR.   5

   OR

   (c) What is the use of light pen ? Explain the working of a light pen.   5

   (d) Give the classification of printers. Explain dot matrix printer in detail.   5

EITHER

4. (a) What do you mean by topology ? Explain tree and circular topologies. 5

   (b) Explain LAN and WAN in detail. 5

   OR

   (c) Write short notes on : 5

   (i) Repeater

   (ii) Gateway

   (d) Explain with an example of peer-to-peer technology and give its architecture. 5

5. Attempt All :

   (a) What is instruction format ? Give two examples. 2½

   (b) What is high level language ? Give names of two HLL. 2½

   (c) Write a short note on MAN. 2½

   (d) What do you mean by router ? 2½