Bachelor of Science (B.Sc. I.T.) Semester-I (CBS) 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 diagrams wherever necessary.

EITHER

1. (A) Define Computer System. Draw the functional block diagram of computer and explain the function of each block. 5

   (B) What is Instruction Cycle ? Explain fetch cycle and execution cycle. 5

   OR

   (C) Write short notes on following Binary codes :
      (i) EBCDIC
      (ii) ASCII. 5

   (D) What is BUS Organization ? Give the functions of each BUS. 5

   EITHER

2. (A) Differentiate between RAM and ROM. Explain different types of ROMs. 5

   (B) Explain :
      (i) Cache memory
      (ii) Flash memory. 5

   OR

   (C) Explain the construction and working of Hard Disk. 5

   (D) Explain working mechanism of BLU-RAY Disc. 5

   EITHER

3. (A) Write short notes on :
      (i) MICR
      (ii) Light Pen. 5

   (B) What is printer ? What are the different types of printers ? How Dot matrix printer works ? 5

   OR

   (C) Write short notes on :
      (i) Barcode Reader
      (ii) Flat bed scanner. 5

   (D) Explain various types of plotters. 5

   EITHER

4. (A) Differentiate LAN and WAN. 5

   (B) Explain the following devices used in computer network :
      (i) Repeater
      (ii) Router. 5

   OR

   (C) Define network topology. Explain STAR topology and TREE topology in brief. 5

   (D) Write short notes on :
      (i) Bluetooth Devices
      (ii) Infrared Devices. 5

5. Attempt all :

   (A) Differentiate between interpreter and compiler. 2½

   (B) Explain static and dynamic RAM. 2½

   (C) Write short note on Voice input. 2½

   (D) Define network architecture. Explain peer-to-peer architecture in brief. 2½