

**Bachelor of Science (B.Sc.) Semester-I (C.B.S.) Examination**  
**COMPUTER SCIENCE (Fundamentals of Information Technology)**  
**Compulsory Paper-2**

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) Draw block diagram of computer and explain the functions of each unit. 5  
(b) What is a compiler and interpreter ? 5

**OR**

(c) What is instruction format ? Explain fetch and execution cycle. 5  
(d) Do as directed :  
(i)  $(1011.011)_2 = (?)_{10}$   
(ii)  $(107.67)_{10} = (?)_{16}$  5

**EITHER**

2. (a) Write a short note on Optical Disk. 5  
(b) What is a memory ? Explain :  
(i) Cache memory  
(ii) Flash memory. 5

**OR**

(c) What is a Blu-Ray Disk ? Explain. 5  
(d) Explain the following :  
(i) RAM  
(ii) ROM  
(iii) PROM  
(iv) EPROM  
(v) EEPROM 5

**EITHER**

3. (a) Give the classification of printers. Explain Inkjet printer. 5  
(b) List various input devices. Explain the “VoiceInput”. 5

**OR**

(c) What is a QWERTY keyboard ? Explain. 5  
(d) What is a scanner ? Explain Flatbed Scanner. 5

**EITHER**

4. (a) Write short notes on Bridge and Gateway. 5  
(b) What is network topology ? Explain Mesh Topology. Give its advantages and disadvantages. 5

**OR**

(c) Write a note on Local Area Network. List the technology and topology used in LAN. 5  
(d) Differentiate between Client Server and Peer-to-Peer Model. 5

5. (a) Write a short note on Address Bus. 2½  
(b) Explain Pen Drive. 2½  
(c) Describe the functions of Light Pen. 2½  
(d) Write a note on Modem. 2½