

**Bachelor of Science (B.Sc.) Semester—I Examination**  
**COMPUTER SCIENCE (FUNDAMENTALS OF INFORMATION TECHNOLOGY)**  
**Optional Paper—2**

Time : Three Hours]

[Maximum Marks : 50

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

(2) Illustrate your answer with suitable diagram wherever necessary.

**EITHER**

1. (a) Draw the block diagram of computer and describe the function of each block of the computer. 5
- (b) What is bus ? Describe various types of buses. 5
- OR**
- (c) What is the need of translator ? Write the difference between compiler and interpreter. 5
- (d) Do as directed :
- (1)  $(357E)_{16} = ( )_{80}$
- (2)  $(12345)_{10} = ( )_2$  5

**EITHER**

2. (a) What is memory ? Explain cache memory in detail. 5
- (b) Explain how data is organised in hard disk. 5
- OR**
- (c) Explain :
- (1) EEPROM
- (2) ROM in detail. 5
- (d) Write a short note on zipdisk. 5

**EITHER**

3. (a) List five input devices and explain any two. 5
- (b) Explain MICR and bar code reader. 5
- OR**
- (c) What is the difference between impact and non-impact printer ? 5
- (d) Explain flatbed plotter. 5

**EITHER**

4. (a) Write short notes on :
- (1) LAN
- (2) WAN. 5
- (b) Define network topology. Explain star and mesh topology in detail. 5
- OR**
- (c) Write short notes on :
- (1) Hub
- (2) Repeater. 5
- (d) What is modem ? What are the main features of modem ? 5
5. (a) Solve :  $(8AD)_{16} = (?)_2$ . 2½
- (b) Explain : SRAM in detail. 2½
- (c) Explain the working of light pen. 2½
- (d) Write a short note on Bluetooth. 2½