

Bachelor of Science (B.Sc. I.T.) Semester-I 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) What is Computer ? Draw a block diagram of a computer system and discuss the functionalities of each in detail. 5

(B) Differentiate between assembly language and high level language. 5

OR

(C) Write short notes on :

(i) Interpreter

(ii) Compiler. 5

(D) Convert the following :

(i) $(1011)_2 = (?)_{10}$

(ii) $(72)_{10} = (?)_2$

(iii) $(11101)_2 = (?)_8$ 5

EITHER

2. (A) Differentiate between static and dynamic RAM. 5

(B) Explain the structure and working mechanism of Hard Disk. Give some advantages of Hard Disk. 5

OR

(C) Explain briefly the cache memory and flash memory. 5

(D) Describe Pen drive and blue ray disk in detail. 5

EITHER

3. (A) Write short notes on :

(i) Mouse

(ii) Light Pen. 5

(B) Enlist the different types of Printers. Explain any two in detail. 5

OR

(C) Write short notes on :

(i) MICR

(ii) Flat bed scanner. 5

(D) Explain different types of plotters. 5

EITHER

4. (A) What do you mean by network ? Explain various types of networks. 5

(B) Explain the following terms in detail :

(i) Routers

(ii) Gateway. 5

OR

(C) Define a topology. Explain bus topology and ring topology in brief. 5

(D) Explain client/server architecture and give some advantages of client/server. 5

5. (A) Convert the following :

$(4B7)_{16} = (?)_{10}$ 2½

(B) Write short note on optical disk. 2½

(C) Explain Barcode Reader in brief. 2½

(D) Write short note on bridge. 2½