

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) Draw neat and labelled diagrams wherever necessary.

EITHER

1. (a) What is instruction format ? Explain fetch and execution cycle. 5
- (b) Do as directed :
 - (i) $(1101.1101)_2 = (?)_{10}$
 - (ii) $(1762.68)_{10} = (?)_{16}$ 5

OR

- (c) Draw the block diagram of computer and explain the functions of each unit. 5
- (d) Explain :
 - (i) Source Program
 - (ii) Object Program. 5

EITHER

2. (a) Explain :
 - (i) ROM
 - (ii) PROM
 - (iii) EPROM
 - (iv) EEPROM. 5
- (b) Explain structure of hard disk with factors that affect the access time of data. 5

OR

- (c) List and explain types of optical disks. 5
- (d) Write short notes on :
 - (i) Static RAM
 - (ii) Dynamic RAM. 5

EITHER

3. (a) List and explain various group of keys of keyboard. 5
- (b) Give the classification of Printers. Explain Inkjet Printer. 5

OR

- (c) List various input devices. Explain the “Voice Input”. 5
- (d) What is plotter ? List different types of plotters and explain any one. 5

EITHER

4. (a) Explain Routers and Brouters in Network. 5
- (b) Explain mesh topology in detail. 5

OR

- (c) Explain Wi-Fi network. 5
- (d) Explain any two network protocols. 5
5. (a) List advantages and disadvantages of Interpreter. $2\frac{1}{2}$
- (b) Write short note on Cache Memory. $2\frac{1}{2}$
- (c) Explain Touch Screen. $2\frac{1}{2}$
- (d) Explain the use of modem in communication. $2\frac{1}{2}$