

First Semester B. Sc. Examination

COMPUTER SCIENCE

Paper - II

(Fundamentals of Information Technology)

Time : Three Hours]

[Max. Marks : 50

- N. B. : (1) All questions are compulsory and carry equal marks.
(2) Draw neat and labelled diagram wherever necessary.

EITHER

1. (a) Draw a well labelled block diagram of a computer and explain the functions of each component in it. 5
- (b) Explain advantages and disadvantages of assembly and high level language. 5

OR

(c) Do as directed :

(i) $(EFD)_{16} = (?)_{10}$

(ii) $(71654)_8 = (?)_2$ 5

(d) Explain the Compiler and Interpreter in brief. 5

EITHER

2. (a) What is memory ? Explain
(i) Cache memory, (ii) Flash Memory. 5



- (b) Explain the working of harddisk with suitable diagram. 5

OR

- (c) Explain the following :—
(i) RAM, (ii) ROM, (iii) PROM, (iv) EPROM, 5
(v) EEPROM.
(d) Write a short note on Zip disk. 5

EITHER

3. (a) Explain keyboard and mouse with diagram. 5
(b) Give the classification of printers. Explain dot matrix printer in detail. 5

OR

- (c) What is plotter ? Explain the working of drum plotter. 5
(d) Define Scanner. Explain Barcode reader and OCR in brief. 5

EITHER

4. (a) What is network topology ? Explain tree and mesh topologies. 5
(b) Explain LAN and WAN with diagram. 5

OR

- (c) Explain Wi-Fi Network. 5



(d) Explain :

- (i) repeater,
- (ii) bridge,
- (iii) router,
- (iv) brouter,
- (v) gateway.

5

5. (a) Explain BCD code. $2\frac{1}{2}$
- (b) Write short note on Blu ray. $2\frac{1}{2}$
- (c) Explain Lightpen in brief. $2\frac{1}{2}$
- (d) Define Network protocols. Enlist them and explain any one protocol in brief. $2\frac{1}{2}$