Total No. of printed pages = 4

IT-301/IT/3rd Sem/2018/M

INFORMATION TECHNOLOGY

Full Marks – 70

Pass Marks – 28

Time – Three hours

The figures in the margin indicate full marks for the questions.

1. Multiple choice questions : $1 \times 5 = 5$

(a) The symbols used in an assembly language are

(i) Codes

(ii) Mnemonics

(iii) Assembler

(iv) None of the above

(b) The printed output from computer is called

(i) Copy (ii) Soft Copy

(iii) Hard Copy (iv) Paper

[Turn over

(c) Which is typically the longest: bit, byte, nibble, word ?

(i) Bit (ii) Byte

(iii) Nibble (iv) Word

(d) Which part interprets program instructions and initiate control operations ?

(i) Input

(ii) Storage unit

(iii) Control unit

(iv) None of the above

(e) Which media does not come under the guided media ?

(i) Optical fibre (ii) Co-axial cable

(iii) Microwave (iv) Twisted Pair

2. Write the full form of the following : 1×5=5

(a) ENIAC

(b) COBOL

(c) EDVAC

(d) ASCII

(e) HTTP

3. Answer the following questions in short : (any *five*) 3×5=15

(a) Explain the characteristics of a Computer.

(b) Differentiate between RAM and ROM ?

(c) State the advantage of using e-mail.

(d) Explain different types of computer software.

(e) Define the term E-commerce ?

(f) What do you mean by data compression and encoding ?

(g) What is net surfing ?

PART – B

3. Answer any *three* of the following questions :

(a) Define the basic characteristics of the following I/O devices : 2×5=10

(i) Keyboard

(ii) Printer

(iii) Mouse

(iv) Scanner

(v) LCD Monitor

(b) Explain about algorithm and flowchart with a proper example and diagram. 10

(c) Explain various types of networks. 10

(d) What is an operating system ? Enlist its function in brief. 2+8=10

4. Answer any *one* of the following questions :

(a) Explain about the different generations of programming language. 5×3=15

(b) Convert the binary number 111101011 to its decimal, octal and hexadecimal equivalent. 2+2+3=7

(ii) Find out the binary code, code length and total length from the following using Huffman coding : 6+1+1=8

Symbol	frequency
A	16
B	10
C	8
D	3
E	2