END SEMESTER EXAMINATION, NOVEMBER- 2018

Semester – 3rd

Subject Code : It-301 (Main)

INFORMATION TECHNOLOGY

Full Marks – 70

Time – Three hours

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

Instructions :

1. *All* questions of PART-A are compulsory.

2. Answer any *five* questions from PART-B.

PART – A

Marks – 25

1. Fill in the blanks :   1×10=10

(a) A memory that requires refreshing of data is
——.

(b) COBOL stands for ——.

(c) Smallest quantum of data is ——.

[Turn over

(d) A set of instructions is called _____.

(e) Hexadecimal value of 13 is _____.

(f) _____ memory is fastest than main memory.

(g) Network of computer network is called _____.

(h) Arranging data in a particular order is known as _____.

(i) Program which acts as a interface between a user and hardware _____.

(j) _____ is a pointing device.

2. Write true or false : 1×10=10

(a) A bit represents an on or off state.

(b) The CPU cache is a type of memory.

(c) The hexadecimal number system contains digits from 1-15.

(d) CPU controls only input data of computer.

(e) A trackball is an output device.

(f) A byte is the smallest unit of information.

(g) Resolution of a printer is the number of dot per inch it produces.

(h) A giga byte is roughly one trillion bytes.

(i) Binary value of 303 is 00110011.

(j) Compiler converts high level language.

3. Choose the correct answer : 1×5=5

(a) Chief component of second generation of computer was

(i) Transistor

(ii) Vacuum tubes

(iii) Integrated circuit

(iv) None of the above

(b) The basic operations performed by a computer

(i) Arithmetic operation

(ii) Logical operation

(iii) Storage and retrieve

(iv) All of the above

(c) Microprocessor as switching devices are for which generation ?

    (i) First   (ii) Second

    (iii) Third   (iv) Fourth

(d) UNIVAC is

    (i)   Universal Automatic Computer

    (ii)   Universal Array Computer

    (iii) Unique Automatic Computer

    (iv) Unvalued Automatic Computer

(e) Which of the following is not an input device ?

    (i)   OCR

    (ii) Optical scanner

    (iii) Voice recognition device

    (iv) COM

PART – B

Marks – 45

4. (a) Differentiate between analog and digital computers.   3

   (b) Explain the characteristics of a computer.   3

   (c) Write differences between main memory and secondary memory.   3

5. (a) What are the characteristics of an algorithm.   3

   (b) Differentiate between compiler and interpreter.   3

   (c) Draw a flowchart to find larger of two numbers.   3

6. (a) Define Internet and WWW.   3

   (b) Explain the different services of Internet.   3

   (c) What is ISP ?   3

7. (a) Explain about ASCII and BCD code. 4

(b) Convert binary number 11001100010 to other bases. 5

8. (a) Explain about the different data compression techniques. 5

(b) Write a note on Huffman coding. 4

9. What is transmission media ? Explain about the different types of transmission media. 9