2014

Time : 3 Hours

Full Marks -75

*Candidates are required to give their answers
In their own words as far as practicable.*

The questions are of equal value

*Answer any five questions
In which Q No.1 is compulsory*

1.   Choose the correct answer of the following :

a)   _____ is a very small computer that can be held in the palm of the hand.

    i)   PDC

    ii)   PC

    iii)   Laptop

    iv)   Mini Computer

b)   A group of 8 bits is called a _____

    i)   Bite

    ii)   Byte

    iii)   Octbits

    iv)   None of the above

d)   The binary equivalent of $(359)_{10}$ is _____

    i)   101010100

    ii)   110011000
    iii)   101100111

    iv)   None of the above

e) A gate which is also known as inverter is _____

    i) AND

    ii) OR

    iii) NOT

    iv) NAND

f) The octal addition of $(25)_8$ and $(15)_8$ is _____

    i) $(42)_8$

    ii) $(40)_8$

    iii) $(41)_8$

    iv) None of these

g) The set of wires, which carry information in a controlled manner is _____

    i) System bus

    ii) Public bus

    iii) Private bus

    iv) None of the above

h) The memory, which is utmost access able to the processor is _____

    i) RAM

    ii) Cache Memory

    iii) ROM

    iv) None of the above

i) Rotational delay is also known as _____

    i) Seek time

    ii) Shift time

  iii) **Latency**

  iv) **Access time**

 j) **Which among the following is not a pointing device?**

  i) **Trackball**

  ii) **Lightpen**

  iii) **Scanner**

  iv) **Mouse.**

2. **Explain the various applications of computer.**

3. **a)** **Draw a block diagram to illustrate the basic organization of a computer system.**

  b) **Explain the functions of various units of a computer system.**

4. **a)** **What do you mean by hard copy and soft copy?**

  b) **Differentiate between impact and non- impact printers.**

5. **Explain the storage organization of a magnetic tape. What are its advantages and Disadvantages?**

6. **What are the different types of computers? Discuss the advantages of using Mini computer over micro computer.**

7. **Perform the binary arithmetic using 2's complement:**

  a) **10111001** **+** **10011001**

  b) **00001010** **-** **00110011**

  c) **1000011** **-** **00110101**

8. **What do you mean by language translator? Differentiate between compiles and Interpreter.**

9. **Differentiate between them :**

  a) **Uniprocessor and multiprocessor**

  b) **Computer and human brain**

10. **What is an instruction Act? Explain RISC and CISC architecture.**