FUNDAMENTALS OF COMPUTER, IBMPC &Q BASIC

XEV (H-1)- BCA (1) YEAR

2013

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 no. **1** which is compulsory.*

1.   **Choose the correct answer of the following :**

(a)   **The first electronic computer that has used the stored program concept introduced by John Von Neumann :**

(i)   **UNIVAC**
(ii)   **EDSAC**
(iii)   **ENIAC**
(iv)   **EDVAC**

(b)   **The unit that performs the arithmetic and logical operations on the stored numbers is known as:**

(i)   **Arithmetic & Logic Unit**
(ii)   **Control Unit**
(iii)   **Memory Unit**
(iv)   **Both (i) & (ii)**

(c)   **Roman number system is a :**

(i)   **Positional number system**
(ii)   **Non-Positional number system**
(iii)   **Both (i) & (ii)**
(iv)   **None**

(d)   The binary equivalent of $(231)_{10}$ is :

    (i)   11100111   (ii)   10111001

    (iii)   01110011   (iv)   None

(e)   Conversion of decimal number 67_{10} to its octal number equivalent is :

    (i) 100_8 (ii) 103_8

    (ii) 109_8 (iv) 99_8

(f)   ALU works on the instructions and data held in the :

    (i)   Notebook   (ii)   Registers

    (iii)   Copy pad   (iv)   I/O device

(g)   Linkage between the CPU and user is provided by:

    (i)   Storage   (ii)   Control unit

    (iii)   Peripheral device   (iv)   Software

(h)   Which one is the impact printer :

    (i)   Laser printer (ii)   Inkjet printer

    (iii)   Thermal Printer   (iv)   Daisy wheel Printers

(i)   The fastest access memory is :

    (i)   Cache memory   (ii)   Main memory

    (iii)   register   (iv)   None

(j)   Which of the following is an application software :

    (i)   DBMS   (ii)   Loader

    (iii)   Linker   (iv)   Compiler

2. What is computer? How does it works? Explain about the different generation of computer?

3. What is the role of Input/Output unit? Discuss about the different types of Printers.

4. What is the purpose of binary coding system? Briefly explain the term BCD,ASCII and EBCDIC.

5. (a) What is the difference between centralized and distributed data processing?

   (b) What is software? How is it different from a program?

6. (a) What is a computer program? List out the characteristics of a good program. How a flow chart is related with a program.

   (b) Write down the algorithm for calculating the area of circle.

7. Discuss the evolution of microprocessor ? Draw the architecture of INTEL 8086 microprocessor.

8. Differentiate between the following (any three) :

   (a) Micro, mini and main frame computers

   (b) Low level and high level language

   © Real time and time sharing processing.

   (d) SASD and DASD

   (e) Online and Offline data entry

9. (a) Explain the booting process of an IBM-PC.

   (b) Explain the difference between batch file, configuration files and system file.

10. **Write notes on any three of the following :**

    (a)   **Central processing**

    (b)   **Electronic mail**

    (c)   **Rom and its types**

    (d)   **Timer display controllers**

    (e)   **Register and its type**