

Roll No.

Total No. of Questions : 09]

[Total No. of Pages : 02

Paper ID [MC101]

(Please fill this Paper ID in OMR Sheet)

MCA (Sem. - 1st)

INTRODUCTION TO INFORMATION TECHNOLOGY (MCA - 101) (N2)

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Attempt any **One** question from each Sections A,B,C,&D.
- 2) Section - E is **Compulsory**.

Section - A

(1 × 10 = 10)

Q1) Fill in the blanks.

Binary	Octal	Decimal	Duodecimal	Hexadecimal
10101010	-----	-----	-----	-----
-----	4567	-----	-----	-----
-----	-----	6789	-----	-----
-----	-----	-----	89ab	-----
-----	-----	-----	-----	cdef

- Q2) (a) Draw the block diagram of computer and explain the function of each block.
- (b) Perform binary subtraction using 2's complement (i) 10101010-01010101
(ii) 01010101-10101010.

Section - B

(1 × 10 = 10)

- Q3) (a) Differentiate between High level language, assembly level language and machine language.
- (b) List various input output devices and explain any one of them.
- Q4) What do you understand by system software and application software? Discuss them with applications.

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Section - C

(1 × 10 = 10)

- Q5)** What do you understand by Operation System? Give its various views. What are the services provided by operating system?
- Q6)** What do you understand by Internet? Discuss its various applications.

Section - D

(1 × 10 = 10)

- Q7)** What do you understand by Decision support system? At what level this system supports managers. How is different from MIS?
- Q8)** Write short notes on the following :

- (a) Inventory Control.
- (b) Remote sensing.
- (c) Multilingual applications.

Section - E

Q9) (10 × 2 = 20)

- a) Convert the following numbers to hexadecimal number and vice versa :-
(i) 101010 (ii) 0101000.
- b) Why 2's complement is used in computers for representation of negative numbers?
- c) Realize an And gate using NOR gates only.
- d) Differentiate between combinational circuit and sequential circuit?
- e) Differentiate between ROM and RAM.
- f) What is telnet?
- g) What is TCP/IP protocol?
- h) Dedifferentiate between on line and Real time operating system.
- i) How email is delivered to its recipient?
- j) What are the applications of Computers in Railways.

