

Roll No.

Total No. of Questions : 13]

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J-3415[S-1271]

[2037]

MCA (Semester - 1st)

INTRODUCTION TO I.T. (MCA - 101)

Time : 03 Hours

Maximum Marks : 75

Instruction to Candidates:

- 1) Section-A is **Compulsory**.
- 2) Attempt any **Nine** questions from Section - B.

Section-A

Q1)

(15 x 2 = 30)

- a) Compute $(1\ 0\ 1\ 1\ 1\ 1\ 1\ 0)_2 + (1\ 0\ 0\ 1\ 1\ 0\ 0\ 1)_2 = (\dots\dots\dots)_2$.
- b) What is excess-3 code.
- c) What is 2's complement of $(1\ 0\ 1\ 1\ 1\ 1\ 1\ 0)_2$?
- d) How many bits are there in 1 kilo bytes?
- e) List various classes of computers.
- f) Write name of any four output devices.
- g) Name any two devices based on magnetic media.
- h) What are various layers in TCP/IP model?
- i) What are various categories of programming languages?
- j) Name various data communication devices attached with your computer.
- k) List any four multi- user operating systems.
- l) What are various computerized activities in banks?
- m) What are the steps required for Internet chatting?
- n) What is real time operating system?
- o) What is TELNET?

P.T.O.

Section-B

(9 x 5 = 45)

- Q2)** Explain various components of computer by using block diagram.
- Q3)** Convert the following :
- (i) $(426)_8 = (\dots\dots\dots)_{16}$ (ii) $(925.125)_{10} = (\dots\dots\dots)_8$
- (iii) $(1\ 0\ 1\ 1\ 0\ 1\ 0\ 1)_2 = (\dots\dots\dots)_{16}$
- Q4)** Write a note on various generation of computers.
- Q5)** What is complement scheme? Explain in terms of binary system. Is it applicable to other number systems also?
- Q6)** Differentiate between system software and application software. Give two examples of each.
- Q7)** Explain working of mouse.
- Q8)** Differentiate between assembly language and high level language.
- Q9)** Differentiate between impact and non-impact printers. Give one example of each.
- Q10)** Define network topology. What are various topologies that can be used for network?
- Q11)** What is Internet? Discuss various services available on Internet.
- Q12)** Discuss applications of Information Technology in education & research.
- Q13)** List any five operating systems.

