1108
B.E. (Computer Science and Engineering)
First Semester
CS-102: Introduction to Computer Science and Engineering

Time allowed: 3 Hours   Max. Marks: 50

NOTE: *Attempt* <u>*five*</u> *questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.*

x-x-x

I.   Attempt the following:-

   a)   What is Trojan horse?

   b)   What is MICR? Where it is used?

   c)   Give the basic difference between Compiler, Interpreter and Assembler.

   d)   Find the decimal equivalent of hexadecimal number 4D.C8

   e)   Differentiate between Intranet and Extranet.

   f)   What is EEPROM?

   g)   What is Computer Vision?

   h)   Differentiate between an Algorithm and a Flow Chart.

   i)   What is Application software?

   j)   List different modes of communication.   (10x1)

UNIT – I

II.   a) Explain different types of mother boards along with their components.

   b) Convert hexadecimal number EBC into its binary and octal equivalent.   (7,3)

III.   a) Explain different levels of the Memory Hierarchy with diagram.

   b) Explain differences between Viruses and Worms.   (2x5)

IV.   a) Briefly differentiate between the following:-

   i)   Von-Newmann model and Turing Model.

   ii)   LI and L2 cache

   b) Explain different social and ethical issues in Computer Science and Engineering. (2x5)

P.T.O.

UNIT – II

V. a) Explain' importance of Theory of Computation in Computer Science and Engineering.

b) Explain latest trends in Computing.   (2x5)

VI. a) What are the roles and responsibilities of a DBA?

b) Explain different operations that can be performed on Stacks and Queues in Data Structure.   (2x5)

VII. a) Explain basic symbols of flow charts. Also explain the advantages of using flow charts.

b) Explain Software Development Life Cycle (SDLC) in Software Engineering.   (2x5)

x-x-x