Exam.Code:0905 Sub. Code: 6657

1078

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. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Attempt the following:
 - a) Distinguish between Viruses and Worms.
 - b) What are the disadvantages of OMR?
 - c) What is system software?
 - d) Convert binary number 100110 into its octal equivalent.
 - e) Briefly define Auxiliary Storage. Give the names of any two Auxiliary Storage devices.
 - f) What is a cache memory? Distinguish between LI and L2 cache.
 - g) What is Turing model?
 - h) Give any two ethical issues related to computing technology.
 - i) Why Data Structures are important in Computer Science & Engineering?
 - j) What is the basic difference between CRT and TFT Monitor?

(10x1)

UNIT-I

- a) Differentiate between Second and Third Generation of Computers.
 - b) Convert the given decimal number into Binary, Octal and Hexadecimal Number: 259,125. (6,4)
- III. a) Draw and Explain general block diagram of computer System.
 - b) What is Virtual Memory? How Virtual Memory is different from Physical memory? (5,5)
- IV. a) Differentiate between the following:
 - i) CD-ROM & DVD-ROM
 - ii) FROM and EPROM
 - b) Compare impact printers with non-impact printers.

(5,5)

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(2)

UNIT-II

- V. a) Explain different Topologies of Computer Networks along with their advantages and disadvantages.
 - b) Explain different professional and development opportunities available in Computing technology. (5,5)
- VI. a) Explain knowledge based system in the context of Artificial Intelligence. (5)
 - b) Give some advantages of DBMS. Explain differences between Data Definition Language, Data Manipulation language and Data Control language in database systems. (2,3)
- VII. a) Explain differences between Flowcharts and Algorithms with a case study.
 - b) What is software re-engineering? Explain various steps of software development process. (5,5)