

DEDUCTED
COMPUTER SCIENCE - 083
CLASS XI

Topic reduced
Unit I: Computer Systems and Organisation <ul style="list-style-type: none">● Encoding Schemes : UTF8, UTF32● Concept of cloud computing and cloud services (SaaS,IaaS,PaaS), cloud (public/private), Blockchain technology
Unit II: Computational Thinking and Programming - 1 Decomposition – concept, need for decomposing a problem, examples of problem solving using decomposition. <ul style="list-style-type: none">● Sorting algorithm: bubble and insertion sort; count the number of operations while sorting.
Suggested Practical List Input a list of elements, sort in ascending/ descending order using Bubble/ Insertion sort.

CLASS XII

Unit I: Computational Thinking and Programming - 2 <ul style="list-style-type: none">● Recursion – simple algorithms with recursion : print a message forever, sum of first n natural numbers, factorial, Fibonacci numbers, recursion on arrays : binary search● Idea of efficiency : performance measurement in terms of the number of operations.● Data-structures: Lists as covered in Class XI, Stacks – Push, Pop using a list, Queues – Insert, Delete using a list. (One of the data structure Stack or Queue. Note : While setting the question paper a students will have an option between Stack and Queue.)
Unit II: Computer Networks <ul style="list-style-type: none">● Web Scripting Client side (VB Script, Java Script, PHP) and Server side (ASP, JSP, PHP), Web 2.0 (for social networking)● E-commerce payment transactions using online banking, mobile banking, payment apps and services.
Unit III: Database Management CREATE TABLE, DROP TABLE, ALTER TABLE, UPDATESET, INSERT, DELETE
1. Suggested Practical List: Python Programming <ul style="list-style-type: none">● Recursively find the factorial of a natural number● Write a recursive code to find the sum of all elements of a list.● Write a recursive code to compute the nth Fibonacci number