

J.S University

MCA 2nd Semester

Assignment:Data Structures using C

Part A

Q1:Define Stack and queue data structure.

Q2:Explain the list representation technique.

Q3:Explain the Dynamic storage allocation technique.

Q4:Explain Depth first search.

Q5:what do you mean by binary tree.explain with example.

PART- B

Q1:Explain Bubble Sort with an example.Write a program in C for bubble sorting.

Q2:Explain intertion sort with an example.Write a program in C for intertion sorting.

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Assignment: Computer Based Numerical & Statistical Techniques

Part A

Q1: Compute the real root of $x^2 - 5x + 3 = 0$ in the interval $[1,2]$ by the Regula Falsi method. Upto three iterations only.

Q2: Find the root of the equation $f(u) = x^3 - 3x - 5 = 0$ which lies between 2 and 3 by the Muller's method.

Q3: Define Rate of convergence. Obtain rate of convergence of Newton Raphson method.

Q4: The ordinates of a normal curve are given by the following table

| | | | | | |
|------|-------|-------|-------|-------|-------|
| $x:$ | .0 | .2 | .4 | .6 | .8 |
| $y:$ | .3989 | .3910 | .3683 | .3332 | .2897 |

Calculate : (i) $y(.25)$ (ii) $y(.62)$

Use Newton's method of interpolation.

Q5: Find the first and second Derivative at 1.1 for the data

| | | | | | | |
|---------|-----|-------|-------|--------|-------|------|
| $x:$ | 1.0 | 1.2 | 1.4 | 1.6 | 1.8 | 2.0 |
| $f(u):$ | 0 | .1280 | .5440 | 1.2960 | 2.432 | 4.00 |

Part B

Q1: Write Short note on Quality control methods.

Q2: Fit the curve $y = ax^b$ to the following data, using methods of least squares.

| | | | | | | |
|------|------|------|------|-----|-----|-----|
| $x:$ | 1 | 2 | 3 | 4 | 5 | 6 |
| $y:$ | 2.98 | 4.26 | 5.21 | 6.1 | 6.8 | 7.5 |

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Assignment: Computer Organization

Part A

Q1: List of registers for the basic computer.

Q2: Explain the format of micro instruction.

Q3: Draw the flow chart that describes the CPU –I/O channel communication.

Q4 Explain about the arithmetic micro operations.

Q5: Explain the instruction pipeline processing in RISC architecture.

Part B

Q1: Explain about the auxiliary memory.

Q2: Explain the selection of address for control memory.

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Assignment: Principles of Management

Part A

Q1: Define Management and its concept ?

Q2: Explain the functions of Management ? What are the managerial skills at various levels.

Q3: Define planning . Explain the Process of planning?

Q4: Describe Directing & Leadership:- X Theory, & Y Theory?

Q5: Define the organizing process and its importance ?

Part – 2

Q1: What is communication and also describe its barriers & remedies ?

Q2: Define Motivation ? Explain the Herzberg's theory ?

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Assignment:Environmental Science and Ethics

Part A

Q1: Explain the short information of ecology & Ecosystem ?

Q2: What is effect on ecology & ecosystem , different development ?

Q3: Explain the global warning concerns ?

Q4: Explain the different source of pollution ?

Q5: Explain the factors effecting water pollution ?

PART-B

Q1: Explain the different source of air pollution ?

Q2: What is Electro static Precipitations ?