

Saket College of Arts, Science & Commerce

F.Y.Computer Science SEM I Assignments Questions

Digital Systems & Architecture

1. Write a short note on 2 bit synchronous up counter
2. Write a short note on 2 bit Asynchronous down counter
3. Describe JK flip flop in brief

Introduction to Programming with Python

1. Explain the features of python.
2. Why python is an open source and beginners language.
3. Explain about python variables and keywords.

LINUX Operating System

1. Explain Linux Architecture with diagram
2. Explain shell in Linux?
3. Write a note on man pages?

Open Source Technologies

1. Difference between open source and proprietary software
2. Describe an open source software development model..
3. Describe open source software license

Discrete Mathematics

1. Verify whether the function $f : Z \rightarrow Z$ defined as $f(x) = 4x - 1$ for all $x \in Z$ is
 - (a) One-to-one
 - (b) onto
2. If $f(x) = 2x^2 + 3x + 1$ find $f(1)$, $f(3)$, $f(-1)$, $f(0)$.
3. Let $A = \{ a, b, c, d \}$. Let R be relation on A with the adjacency matrix. Draw the digraph of

$$R = \begin{bmatrix} 1 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 1 & 1 & 1 & 0 \\ 0 & 1 & 0 & 1 \end{bmatrix}$$

R.

Descriptive Statistics

1. Draw Histogram

Marks	0-10	10-20	20-30	30-40	40-50
No of students	10	25	30	28	15

2 Construct a frequency polygon for the data given below :

Class	10-20	20-30	30-40	40-50	50-60
frequency	5	11	18	15	7

3 Calculate arithmetic mean of the following distribution.

X	04	06	09	10	15
No. of families (f)	05	10	10	07	08

Soft Skills Development

1. What are Soft-skills? Discuss its importance in professional life.
2. Explain Maslow's Theory of Needs.
3. Write a Short note on Positive Thinking