Computer Science Department

F.Y.B.Sc.C.S. SEM I ATKT Internal Assignment Topics March 2024

Subject: Digital Systems & Architecture

1. Design Half adder & explain how it is a combinational circuit?
2. Draw an explain single instruction multiple data organization of parallel computing?
3. Explain SR latch using NAND gate?

Subject: Introduction to Programming with Python

1. What are the benefits of using Python?
2. What are the key features of Python?
3. What are the common built-in data types in Python?

Subject: LINUX Operating System

1. Explain Sed regular expression?
2. Explain sudo command in detail?
3. What is the use of case commands? Explain with an example?

Subject: Open Source Technologies

1. What is virtualization ? Explain the advantages of virtualization techniques?
2. Explain features of linux operating system?
3. Define open source initiative.

Subject: Discrete Mathematics

1. Write adjacency matrix R={(1, 2), (3, 4), (3, 2), (4, 5), (5, 3), (1,4)}
2. A group of 30 people have been trained as astronauts to go on the first mission to mars. How many ways are there to select a crew of six people to go on the mission???
3. Define directed graph AND complete graph with example.

Subject: Descriptive Statistics

1. The average daily wages of all 60 workers in a factory is Rs.60. An average daily wages of female workers is Rs. 45 . Calculate an average daily wages of male workers if one third workers are male.
2. Obtain regression coefficient b_{yx} and b_{xy} when S.D of x are 60, S.D of y are 30 and correlation r =0.2.
3. find mean of 4,5,10,12,15.

Subject: Soft Skills

1. Explain any one theory of ethic with an example.
2. Elaborate on "The Six Thinking Hats Method."
3. What is the significance of Creativity in Workplace?