

Daffodil International University

Quiz 2 (Section: 44G)

Course Title: Computer Fundamental

Course Code : SE111

Date : 15-04-2025

Time : 45 minutes

Question	Total 15
1. At Daffodil School, a unique tradition has been established: the annual tech workshop is planned only in common years . The IT department needs a program that checks whether a given year is a common year or not. Your task is to write an algorithm to help determine if a year is a common year , so the school can decide whether to organize the event.	4
2. Sunrise Public School is building a Smart Report Card System that can automatically assign grades to students based on their exam scores (out of 100). The goal is to reduce manual effort and ensure consistent grading. determine their grade using the following criteria: • Marks 90 or above → Grade A • Marks 75 to 89 → Grade B • Marks 50 to 74 → Grade C • Marks below 50 → Grade F Design a flowchart that: - Accepts the student's marks as input - Uses decision-making steps to compare the marks - Outputs the correct grade based on the rules above	5
3. You've been hired as a network consultant for a company moving into two newly constructed office buildings. Each building has a different network setup, and your job is to analyze and identify the topologies used. Building A has a setup where each device is directly connected to every other device. The network remains functional even if one device fails, as there are multiple paths for communication. Building B uses a single backbone cable to which all devices are connected. Data travels along this cable, and if the main cable fails, the entire network goes down. - Which topology is used in Building A and Building B? - Discuss the advantages and disadvantages of each topology.	3+3