



Daffodil International University
Faculty of Science & Information Technology
Department of Software Engineering

Course Code: SE411, Course Title: Software Project Management & Documentation
Quiz 3: Section:44_I Time: 30 Minutes

Smart Disaster Response and Emergency Management System

A private university plans to develop a **Smart Campus Management System** to improve campus operations and student services. The proposed system will integrate smart attendance, classroom and laboratory booking, campus security monitoring, mobile notifications, transportation tracking, digital payment, and real time facility management.

The university has approved a **10 month implementation period** with a fixed budget. The project involves students, faculty members, administrative officers, security personnel, transport operators, software developers, hardware suppliers, payment service providers, and university management. The project team has limited experience integrating IoT devices and third party payment services. The university also needs the system to remain available during peak registration and examination periods.

a) Conduct a **SWOT Analysis** of the Smart Campus Management System and justify whether the university should proceed with the project. [5 Marks]

b) The project manager is evaluating three options for procuring the required computing infrastructure:

Option	Initial Cost	Monthly Operating Cost	Maintenance Cost	Salvage Value
On Premise Server	\$80,000	\$4,000	\$3,000/month	\$25,000
Public Cloud	\$8,000	\$18,000	Included	\$0
Hybrid Infrastructure	\$45,000	\$10,000	\$2,000/month	\$12,000

The project duration is **10 months**.

Calculate the **total procurement cost** of each option and recommend the most appropriate option considering **cost, reliability, scalability, and the project deadline**. [5 Marks]

c) Prepare a **Communication Management Plan** showing how project information will be communicated among university management, faculty members, students, developers, suppliers, security personnel, and other relevant stakeholders. Include the **stakeholder, information, communication method, frequency, and responsible person**. [5 Marks]