Daffodil International University
Faculty of Business and Entrepreneurship
Department of Business Administration
Program: BBA

Semester: Spring, 2026
Time: 120 minutes
Course Code: 0612-413
Section: 64-A

Exam: Semester Final
Full Marks: 40
Title: Systems Design & Analysis
Course Teacher: MR

Question No. 1: [CLO 2, Level 3] **[Marks: 5+5=10]**

Microsoft Visio is a versatile diagramming tool designed for business to visualize workflows, network systems, org charts, and floor plans, enhancing communication and process optimization. It enables professionals to create complex visuals using familiar Microsoft Office tools, supporting BPMN, data visualization, and real-time collaboration.

Based on your understanding, **develop** a network flow diagram configuring a local area network (LAN) to secure an internet connection. Additionally, **construct** a basic flowchart diagram that demonstrates the online bus ticket booking process, showing the main stages from login to ticket order completion.

Question No. 2: [CLO 3, Level 4] **[Marks: 5+5=10]**

A data flow diagram (DFD) is a visual representation of the flow of data through an information system or business process. DFDs make complex systems easier to understand and are a popular resource for software engineering, systems analysis, process improvement, business management and agile software development.

List out data flow diagram symbols and **analyse** the DFD integrated customer support systems event table.

Question No. 3: [CLO 2, Level 3] **[Marks: 5+5=10]**

User Interface design focuses on crafting the visual look, interactivity, and feel of digital products, such as websites and apps, to maximize usability and user experience. It involves creating intuitive interfaces with elements like buttons, menus, and layout, ensuring they are engaging, consistent, and user-friendly.

Identify the principles of user-centered design and **develop** the basic guidelines for designing the user interface.

Question No. 4: [CLO 3, Level 4] **[Marks: 5+5=10]**

In the world of systems analysis and engineering, output design refers to the process of planning how information produced by a system is presented to its users. Its primary goal is to ensure that information is clear, accurate, and actionable so that users can make informed decisions.

Compare the output methods based on their advantages & disadvantages and **list** out the factors to consider for choosing output technology.