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

Semester: Spring, 2026
Time: 90 minutes
Course Code: 0612-413
Section: 64-A

Exam: Mid Term
Full Marks: 20
Title: Systems Analysis & Design
Course Teacher: Md. Mahbobor Rahaman

*[Answer **ALL** the following questions. Figures in the brackets indicate marks assigned to each question.]*

Question No. 1 [CLO 1, Level 2] **[Marks: 05]**

Information systems are integral to the functioning of modern organizations, as they support the collection, processing, storage, and dissemination of information. They help organizations manage operations efficiently, make informed decisions, and adapt to changing business environments. Understanding the components of information systems and how information technology influences system design is essential for improving organizational performance and achieving strategic goals. Organizational systems refer to the formal structure, processes, policies, and procedures governing an organization's operations. They are typically documented and can be designed, modified, and adapted to achieve specific objectives.

Explain the components of information systems and **illustrate** the impact of information technology on system design.

Question No. 2 [CLO 2, Level 4] **[Marks:10]**

Analyze the data provided in the table to determine the most cost-effective and time-efficient critical path. Discuss how the identified path impacts overall project performance and resource allocation.

Task	Precedence	Time	Cost	Task	Precedence	Time	Cost
1	None	1 Days	Tk.500	8	5, 6,7	1 Days	Tk.2100
2	None	2 Days	Tk.1500	9	6,7,8	3 Days	Tk.1500
3	None	3 Days	Tk.2500	10	8,9	2 Days	Tk.4500
4	1	2 Days	Tk.600	11	8,9,10	3 Days	Tk.8700
5	1	4 Days	Tk.3700	12	11	4 Days	Tk.9800
6	2	3 Days	Tk.5800	13	12	2 Days	Tk.2300
7	2,3,4	5 Days	Tk.500	14	12,13,14	3 Days	Tk.800
				15	13,14,15	5 Days	Tk.250

Question No. 3 [CLO 3, Level 3] **[Marks: 05]**

Systems development tools are software applications and platforms that assist analysts, designers, and programmers in creating, testing, and maintaining information systems. Using these tools in practical scenarios allows organizations to streamline development, reduce errors, and improve system quality. **Identify** & describe the systems development tools.

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