

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

Semester: Summer 2025

Time: 120 minutes

Course Code: 0612-325

Title: Data Communication and Networking for Business

Section: MIS-403 (63-MIS)

Exam: Final Term

Full Marks: 40

Course Teacher: Azmery Sultana

[Answer the all 4 (four) questions from the questions given below. Figures in the bracket indicate marks assigned to each question. Any kind of unfair means is strictly prohibited. Read the questions attentively and write down your answer. Relevant example, figures will carry greater marks]

Question no 1 [CLO 2 Level 2]

[Marks: 5X2=10]

- a. **Explain** line coding and **illustrate** any two-line coding schemes with relevant figures.
- b. **Demonstrate** impact of lack of synchronization in digital transmission with an example and relevant figures.

Question no 2 [CLO 2, Level 5]

[Marks: 5X2=10]

- a. **Determine** the main techniques of digital-to-analog conversion. **Interpret** any two techniques with proper explanation as well as relevant figures.
- b. **Evaluate** the key characteristics Quadrature Amplitude Modulation (QAM) with relevant figure.

Question no 3 [CLO 3 Level 4]

[Marks: 5X2=10]

- a. **Compare** Amplitude Modulation (AM) and Frequency Modulation (FM).
- b. **Contrast** between guided media and unguided media with relevant examples.

Question no 4 [CLO3 Level 5]

[Marks: 5X2=10]

- a. A network with bandwidth of 10 Mbps can pass only an average of 18000 frames per minute with each frame carrying an average of 10000 bits. **Determine** the throughput of this network.
- b. **Justify** the importance of twisted-pair cables and coaxial cable constructions.