ourdiu.com | Shared by Tasfia Zahan

Daffodil International University

Faculty of Business & Entrepreneurship
Department of Accounting
Program: BBA in Accounting

Semester: Fall-2026
Time: 01 Hour 30 Minutes
Course Code: 0541-201
Section: 5A

Examination: Mid-term
Full Marks: 25
Course Title: Business Mathematics
Teacher's Initial: **AKC**

Answer the following questions:

1		**Define** Square Matrix & Identity Matrix. **Describe** the Addition and Multiplication of Matrices with example.	**2+3** CLO-01 Level 1
2	(a)	**Compute**, the Interest rate compounded quarterly will a sum of money be triple in 11 years.	2.5 CLO-02 Level 3
	(b)	At 9.50% compounded monthly, **Compute** how many months will it take tk.12,000 to grow to tk.22,000?	2.5 CLO-02 Level 3
3	(a)	Saki borrowed $3,50,000 from a bank to buy a motor-bike at 11.50% interest compounded semi-annually. The debt is to be amortized by semi-annual payments each over a period of two years. ➢ **Calculate** the amount of each payment ➢ **Calculate** the Interest. ➢ **Demonstrate** the Amortization Schedule Table	2.5 CLO-02 Level 3
	(b)	New venture corporation has decided to transfer a sum of money to a reserve account at the end of each month to accumulate $10,00,000 to be used to replace machinery 10 years from now. **Calculate** How much should be transferred every month if 9.50% interest compounded monthly is credited to the reserve?	2.5 CLO-02 Level 3
4		The total cost C of producing x units of a company is given by, $C = 28000 + 80x$ and the Revenue function is $R = 120x$. If 1200 units are made and sold, then **Calculate** the following: a) The Variable cost and Total cost? b) The average cost per unit? c) The net Profit or Loss? d) The Break-even quantity? e) Chart the Break Even Diagram.	05 CLO-02 Level 3
5		A company expects fixed cost of $ 4000. Margin is to be 20% of retail and there is no other Variable Cost in addition to cost of goods. Then **Calculate** the following: a) The equation relating Cost and Sales. Also Write the Profit equation. b) The net profit if sales are $ 12,000? c) The net profit if sales are $ 45,000? d) The breakeven sales volume. e) Draw the Break Even Diagram.	05 CLO-02 Level 3

TAKE CARE & BEST!!!

ourdiu.com