Track: Unified

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NOTICE: The Answer Contains 6 Pages

#### KINGDOM OF BAHRAIN MINISTRY OF EDUCATION

نموذج امتحان محاكى لنهاية الفصل الدراسي الثاني للتعليم الثانوي للعام الدراسي 2024/2023

Sakeena Ahmed deposited BD2,600 in a bank at 12% annually compounded quarterly- Find future value at the end of 5 years and 9 months and find the

COURSE NAME: Financial Math COURSE CODE: FIN316

TRACK: Unified TIME: 2 Hours

Read all the instruction for each question carefully before answering questions.

### First Part: compound Interest

### **Question One:**

compound interest.	
Question Tow:	
Oucolion tow.	
Find the future value that Saad will get if he saves BD2,000 in a bank for 10 years at	
Find the future value that Saad will get if he saves BD2,000 in a bank for 10 years at changing rate, as following: at 5% annually for the first 5 years, 4.6% annually for	
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By student: Qassim Hassan Almudaweb

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Ques	tion Three:		
Find t			fter 5 years is BD1469.330 and the lathe interest.
			_
Ques	stion Four:		
		annually after 3	years he withdrew from his account
-		•	find the future value at the end of 10
years?		t 070 annually	inia the fatare value at the ena of 10
j cars.			

Fin 316	Track: Unified	Page 3	NOTICE: The Answer Contains 6 Pages
	Second Part: Annuities		
	Question One:		
		ring: and interest at the	-
	Question Tow:		
	Sajeda deposits a sum of mo amount of annuity became BI		ging of each year at 4% annually and the greats.
	What was the value of each a	nnuity?	

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# Third Part: Capital Budgeting Decision

Question One (A-b-c):

The following A project "their cash flow and using 8% discount rate.

Cash Flow	Project A
Cost (Cash Outflow)	BD20,000
Cash inflow year 1	BD6,000
Cash inflow year 2	BD6,000
Cash inflow year 3	BD6,000
Cash inflow year 4	BD6,000

A - Payback Period Method.	
Projects A: (Fixed Cash Inflow):	

#### b- Net Present Value Method.

Projects A: (Fixed Cash Inflow):

Trojec	Hojects A. (Hixed Cash hillow).				
Year	Cash flow (CF)	X (1+i )-n	PV of cash flow		
0					
1					
2					
3					
4					
	Net present value (NPV)				

c-	Pro	fitab	ility	Index	Method
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PI project A = .....

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Four	th Part: Break-even	<u>Analysis</u>	
Oues	tion One:		
Abdul			year. Sales will be BD370,000, its ble cost per unit is BD50.
	What are the company's fi	-	d to be next year? units and sales revenues for break-even?
	•••••		
Ques	tion Tow:		
ABC (The to Requir	Company sold a computer tal annual fixed cost is BD red:	0160,000.	and it had variable cost BD12 per unit.
ABC (The to Requir	Company sold a computer tal annual fixed cost is BD red:	0160,000.	and it had variable cost BD12 per unit.
ABC (The to Requir	Company sold a computer tal annual fixed cost is BD red: How many units must be s	0160,000. sold to earn an ope	
ABC (The to Require 1-	Company sold a computer tal annual fixed cost is BD red: How many units must be something to the solution of t	0160,000. sold to earn an ope eded to earn an ope	erating income of BD40,000.
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ABC (The to Require 1-	Company sold a computer tal annual fixed cost is BD red: How many units must be something to the solution of t	0160,000. sold to earn an ope eded to earn an ope	erating income of BD40,000. erating income of BD40,000.
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# Fiveth Part: Financial Ratio Analysis

# **Question One:**

The balance sheet and income statement for MRG Company are as follows.

Balance Sheet	<b>BD</b> 000
Cash	500
Account Receivable	2,000
Inventories	1,000
Current Assets	3,500
Fixed Assets	4,500
Total Assets	8,000
Current Liabilities	2,000
Long-term debt	2,000
Owners' Equity	4,000
Total Liabilities and equity	8,000

Income Statement	BD 000
Net Sales (Revenues)	8,000
- Cost of Goods Sold	3,200
Gross Profit	4,800
- Operating Expenses	800
Operating Income	4,000
Interest Expenses	1,000
Profits before taxes	3,000
Tax (5%)	150
Net Income	2,850

No	Required	
1	Gross profit margin%	
2	Profit margin%	
3	Working Capital	
4	Capital Employed.	
5	Return on capital employed	
6	Current ratio.	
7	Acid test ratio (Quick Ratio).	

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