MULTIPLE CHOICE QUESTIONS (45 %)

1 - Foster Trucking Incorporated has just issued preferred stock (cumulative) with par value of $100 and an annual dividend rate of 7%. The preferred stock is currently selling for $35 per share. What is the yield or return on this preferred stock?

a. 2.45%
b. 20%
c. 25%
d. 30%

Use the following to answer numbers 2 to 7

Savoir Company produces a single product. Variable manufacturing overhead is applied to products on the basis of direct labor-hours. The standard costs for one unit of product are as follows:

Direct material: 6 ounces $0.50 per ounce	$ 3.00
Direct labor: 0.6 hours at $30.00 per hour	18.00
Variable manufacturing overhead: 0.6 hours at $10.00 per hour	6.00
Total standard variable cost per unit	$27.00

During June, 2,000 units were produced. The costs associated with June's operations were as follows:

Material purchased: 18,000 ounces at $0.60 per ounce	$10,800
Material used in production: 14,000 ounces	——
Direct labor: 1,100 hours at $30.50 per hour	$33,550
Variable manufacturing overhead costs incurred	$12,980

2- The materials quantity variance is:

a. $ 800 Favorable
b. $1,000 Unfavorable
c. $1,050 Favorable
d. $1,100 Unfavorable

3- The materials price variance is:

a. $1,200 Unfavorable
b. $1,350 Favorable
c. $1,600 Favorable
d. $1,800 Unfavorable

4- The labor efficiency variance is:

a. $3,000 Favorable
b. $3,630 Favorable
c. $4,150 Unfavorable
d. $5,000 Unfavorable

5- The labor rate variance is:

a. $430 Unfavorable
b. $500 Favorable

c. $550 Unfavorable
d. $640 Favorable

6- The variable overhead efficiency variance is:
a. $ 840 Unfavorable
b. $ 930 Favorable
c. $1,000 Favorable
d. $1,200 Unfavorable

7- The variable overhead rate variance is:
a. $1,430 Favorable
b. $1,650 Unfavorable
c. $1,720 Favorable
d. $1,980 Unfavorable

Use the following to answer numbers 8 to 12
The following data are given for Alright Aluminum Company:

Initial cost of proposed equipment	$75,000
Estimated useful life	7 years
Estimated annual savings in cash operating expenses	$18,000
Predicted residual value at the end of the useful life	$ 3,000
Cost of capital	12%
PV factor of an annuity of $1 at 12%	4.564
PV factor of $1 at year 8	0.452

8- The payback period is:
a. 4.167 years
b. 4.254 years
c. 5.348 years
d. 5.741 years

9- Present value of estimated annual savings in cash operating expenses is:
a. $81,485
b. $81,824
c. $82,125
d. $82,152

10- Present value of predicted residual value at the end of the useful life is:
a. $1,113
b. $1,263
c. $1,302
d. $1,356

11- Total present value (PV) of estimated cash flows is:
a. $83,508
b. $83,591

c. $83,614
d. $83,748

12- Net present value (NPV) is:
a. $8.350
b. $8.402
c. $8.479
d. $8.508

Use the following to answer numbers 13 and 14
The Anderson Company has recently purchased a plant to manufacture a new product. The following data pertain to the new operation:

Estimated annual sales	3,500 units at$20
Estimated costs:	
Direct materials	$6.00/unit
Direct labor	$1.00/unit
Factory overhead (all fixed)	$12,000 per year
Selling Expenses	30% of sales
Administrative expenses	$16,000 per year

13- The break-even point in dollars is:
a. $77,000
b. $78,000
c. $79,000
d. $80,000

14- What is the selling price if the profit per unit is $2.04?
a. $24.24
b. $24.34
c. $26.24
d. $26.34

Use the following to answer numbers 15 to 18
The following information is given for the Vendor Company:

Fixed costs	$30,000 per period
Variable cost	$5/unit
Selling price	$8/unit

15- The margin of safety at the 12,000 unit-level is:
a. 16.7%
b. 16.9%
c. 17.1%
d. 17.3%

16- What is the net income when the sales are $120,000?
a. $13,500
b. $14,000

c. $14,500
d. $15,000

17- The sales in units which is required to achieve a net income of 10% of sales is:
a. 13,384
b. 13,445
c. 13, 563
d. 13,636

18- What is the break-even in units if variable costs are increased by $1 per unit and the total fixed costs are decreased by $5,000?
a. 12,500
b. 12,700
c. 12,900
d. 13,100

19- Aviation Company is considering the following alternatives:

	Alternative A	Alternative B
Revenues	$50,000	$60,000
Variable costs	30,000	30,000
Fixed costs	10,000	16,000

What is the incremental profit between alternative A & B?
a. $10,000
b. $0
c. $6,000
d. $4,000

Use the following to answer numbers 20 to 23
The following data on production, materials required for products X and Y, and inventory pertain to the budget of MNO Company:

	Product X	Product Y
Production (units)	2,000	3,000
Materials (units)		
A	3.0	1.0
B	4.0	6.5

	Beginning	Desired Ending	Price/ Unit
Materials inventory			
A	2,000	3,000	$2
B	6,000	6,000	$1.20

20- What is the number of material units needed to produce products X and Y?
a. 6,000 units of material A and 18,200 units of material B.
b. 7,500 units of material A and 21,300 units of material B.
c. 8,500 units of material A and 24,400 units of material B.
d. 9,000 units of material A and 27,500 units of material B.

21- What is the cost of materials used for production?

a. $12,000 material A and $21,840 material B.
b. $14,500 material A and $26,650 material B.
c. $18,000 material A and $33,000 material B.
d. $20,500 material A and $39,200 material B.

22- What is the number of material units that should be purchased?

a. 10,000 material A units and 27,500 material B units.
b. 12,300 material A units and 30,050 material B units.
c. 14,500 material A units and 33,000 material B units.
d. 16,750 material A units and 38,800 material B units.

23- What is the cost of the material units that should be purchased?

a. $18,000 material A and $32,000 material B.
b. $20,000 material A and $33,000 material B.
c. $22,000 material A and $35,500 material B.
d. $24,000 material A and $38,000 material B.

Use the following information to answer questions 24–25.

Vinnie Morelli Corporation has the following overhead costs and cost drivers. Direct labor hours are estimated at 100,000 for the year.

Activity Cost Pool	Cost Driver	Est. Overhead	Cost Driver Activity
Ordering and Receiving	Orders	$ 120,000	500 orders
Machine Setup	Setups	297,000	450 setups
Machining	Machine hours	1,500,000	125,000 MH
Assembly	Parts	1,200,000	1,000,000 parts
Inspection	Inspections	300,000	500 inspections

24. If overhead is applied using traditional costing based on direct labor hours, the overhead application rate is

a. $9.60.
b. $12.00.
c. $15.00.
d. $34.17.

25. If overhead is applied using activity-based costing, the overhead application rate for ordering and receiving is

a. $1.20 per direct labor hour.
b. $240 per order.
c. $0.12 per part.
d. $6,834 per order.

26. The following information is taken from the production budget for the first quarter:

Beginning inventory in units	900
Sales budgeted for the quarter	342,000
Capacity in units of production facility	354,000

How many finished goods units should be produced during the quarter if the company desires 2,400 units available to start the next quarter?

a. 343,500
b. 340,500
c. 355,500
d. 344,400

27. A company purchases 15,000 pounds of materials. The materials price variance is $6,000 favorable. What is the difference between the standard and actual price paid for the materials?

a. $2.00
b. $0.40
c. $2.50
d. $10.00

28. What type of ratios best measure the short-term ability of the enterprise to pay its maturing obligations and to meet unexpected needs for cash?

a. Leverage
b. Solvency
c. Profitability
d. Liquidity

Use the following information for questions 29 and 30:

Moon Beam, Inc. has the following income statement (in millions):

MOON BEAM, INC.
Income Statement
For the Year Ended December 31,

	2008	**2007**
Net Sales	$180	$150
Cost of Goods Sold	120	100
Gross Profit	60	50
Operating Expenses	33	60
Net Income	$ 27	(10)

29.Using vertical analysis, what percentage is assigned to Cost of Goods Sold for 2008?

a. 67%
b. 33%
c. 100%
d. None of the above

30. Using vertical analysis, what percentage is assigned to Net Income for 2008?
    a. 100%
    b. 85%
    c. 15%
    d. None of the above

PROBLEM SOLVING

PROBLEM 1 (4%)

A portfolio consists of assets A and B. Asset A makes up one-third of the portfolio and has an expected return of 18 percent. Asset B makes up the other two-thirds of the portfolio and is expected to earn 9 percent.

Required:

What is the expected return on the portfolio?

PROBLEM 2 (12%)

Safety Corporation's financial statements appear below:

Safety Corporation Balance Sheet December 31, N		
Assets:		
Current Assets		
Cash	$100,000	
Marketable Securities	200,000	
Inventory	300,000	
Total Current Assets		$ 600,000
Noncurrent Assets		
Fixed Assets		500,000
Total Assets		$1,100,000
Liabilities and Stockholders' Equity:		
Current liabilities	$200,000	
Long-Term liabilities	100,000	
Total liabilities		$ 300,000
Stockholders' Equity		
Common stock, $1 par value, 100,000 shares	$100,000	
Preferred Stock	50,000	
Premium on Common Stock	500,000	
Retained Earnings	150,000	
Total Stockholders' Equity		800,000
Total Liabilities and Stockholders' Equity		$1,100,000

Safety Corporation Income Statement For the year Ended December 31, N	
Net Sales	$10,000,000
Cost of Goods Sold	6,000,000
Gross Profit	$ 4,000,000
Operating Expenses	1,000,000
Income before Taxes	$ 3,000,000
Income Taxes (50% rate)	1,500,000
Net Income	$ 1,500,000

Additional information available is a market price of $150 per share of common stock and total dividends of $600,000 for common shareholders for the year 'N', and $250,000 of inventory as of December 31, 'N – 1'.

Required:

Compute the following ratios:

(a) Current ratio
(b) Quick ratio
(c) Inventory turnover
(d) Average age of inventory (Days sales in Inventory)
(e) Debt-equity ratio
(f) Earnings per share (EPS)
(g) Common Dividends per share (DPS)
(h) Common Dividend payout ratio (DPR)

PROBLEM 3 (10%)

The administrator of Valley Hospital would like a cost formula linking the costs involved in admitting patients to the number of patients admitted during a month. The admitting department's costs and the number of patients admitted during the immediately preceding eight months are given in the table below:

Month	Number of Patients Admitted	Admitting Department Costs
May	1,800	$ 14,700
June	1,900	15,200
July	1,700	13,700
August	1,600	14,000
September	1,500	14,300
October	1,300	13,100
November	1,100	12,800
December	1,500	14,600

Required:

a- Use the high-low method to establish the fixed and variable components of admitting costs.

b- Fill the fixed and variable components of admitting costs calculated from the high – low method in part (a) as a cost formula in the linear equation form: $Y = a + bX$

PROBLEM 4 (11%)

Sophie's Pet Shop is considering the purchase of a new delivery van. Sophie Smith, owner of the shop, has compiled the following estimates in trying to determine whether the delivery van should be purchased:

Cost of the van	$25,000
Annual net cash flows	4,300
Salvage value	3,000
Estimated useful life	8 years
Cost of capital	10%
Present value of an annuity of $1	5.335
Present value of $1 – for year 8	0.467

Sophie's assistant manager is trying to convince Sophie that the van has other benefits that she hasn't considered in the initial estimates. These additional benefits, including the free advertising the store's name painted on the van's doors will provide, are expected to increase net cash flows by $500 each year.

Required:

1. Calculate the net present value of the van, based on the initial estimates. Should the van be purchased? Justify your answer

2. Calculate the net present value, incorporating the additional benefits suggested by the assistant manager. Should the van be purchased? Justify your answer

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PROBLEM 5 (10%)

Eagle Corporation has the following direct labor requirements for the production of a machine tool set:

Direct Labor	Required Time (hours)	Hourly Rate ($)
Machining	6	10
Assembly	10	8

Forecasted sales for June, July, August and September are 6000, 5000, 8000 and 7000 units, respectively. June 1 beginning inventory of the tool set was 1500 unit. The desired units in ending inventory each month is one-half of the forecasted sales for the following month.

Required:

1. Prepare a production budget (in units) for the months of June, July and August.
2. Develop a direct labor budget (in $) for the months of June, July and August for each type of direct labor.

PROBLEM 6 (8%)

Assume that House and Garden Depot expects each division to earn a 16% target rate of return. Assume that the company's original Retail Division had the following results last year (in millions of dollars):

Operating income	$ 1,450
Total Average assets	16,100
Current liabilities	3,600
Sales	26,500

Required:

a- Compute the Retail Division's ROA (Return on Assets).

b- Compute the Retail Division's RI (Residual Income).