

**Management Advisory Services
Final Pre-board Examination**

Direction: Choose the letter corresponding to the best answer for each of the questions provided below. This examination consists of 70 items and the exam is good for three (3) hours. Good luck!

For the next two items:

Following are the costs incurred by Nimo Manufacturing Coporation during the previous month:

Direct materials	P5,000
Indirect materials	2,000
Direct labor	6,000
Indirect labor	1,000
Factory utilities	4,000
Advertising costs	8,000
Sales commissions	12,000
Depreciation on administration building	3,000
Salaries of administrative personnel	20,000
Depreciation - delivery equipment	2,000
Overtime pay - factory workers	1,500
Rework cost on defective products discovered during quality inspection	2,500

1. Total product costs:

- a. 67,000
- b. 45,000
- c. 22,000
- d. 18,000

2. Total period costs:

- a. 67,000
- b. 45,000
- c. 49,000
- d. 22,000

3. OZ Corporation planned and actually produced 100,000 units of its only product in 2021, its first year of operations. Variable production costs was P60 per unit of product. Planned and actual fixed production costs was P800,000 and marketing and administrative costs totaled P500,000 in 2021. OZ Corporation sold 80,000 units of the product in 2021 at a selling price of P80 per unit.

What is the cost of the ending inventory assuming variable costing is used?

- a. P1,360,000
- b. P1,460,000
- c. P6,000,000
- d. P1,200,000

For the next two items:

RMC Motors Inc. produces and sells a single product. The selling price is P25 and the variable costs is P15 per unit. The corporation's fixed costs is P100,000 per month. Averaging monthly sales is 11,000 units.

4. The corporation's contribution margin per unit and as a percent of sales (CMR) is

- a. P10 per unit; 40%
- b. P40 per unit; 160%
- c. 10 units; 40%
- d. P10 per unit; 60%

5. The corporation's break-even point is
- a. P10,000
 - b. 250,000 units
 - c. 10,000 units or P250,000
 - d. 250,000 units or P10,000
6. The following direct labor information pertains to the manufacture of Part A35:

Number of hours required to make a part	2.5 DLH
Number of direct workers	75
Number of total productive hours per week	3,000
Weekly wages per worker	P1,000
Laborers' fringe benefits treated as direct labor costs	25% of wages

What is the standard direct labor cost per unit of Part A35?

- a. P62.50
 - b. P41.67
 - c. P84.13
 - d. P78.13
7. Under a standard cost system, the materials quantity variance was recorded at P1,970 unfavorable, the materials price variance was recorded at P3,740 favorable, and the Goods in Process was debited for P51,690. Ninety-six thousand units were completed. What was the per unit price of the actual materials used?
- a. P0.53 each
 - b. P0.52 each
 - c. P0.54 each
 - d. P0.51 each
8. At a production level of 4,500 units, a project has total costs of P108,000. The variable cost per unit is P11.20. Assume the firm can increase production by 1,000 units without increasing its fixed costs. What will the total costs be if 4,800 units are produced?
- a. P102,780
 - b. P104,640
 - c. P106,400
 - d. P111,360

For the next five questions.
JMNA Manufacturing Corp. has the following cost of production data for the year:

Work-in-process beginning:

	Job 03	Job 04
Direct materials	2,400	1,500
Direct labor	3,600	2,880
Applied overhead	?	?

Finished goods beginning:

	Job 01	Job 02
Direct materials	18,000	1,500
Direct labor	24,000	2,880
Applied overhead	?	?

Total manufacturing cost added during the year:

	Job 03	Job 04	Job 05	Job 06
Direct materials	10,920	13,200	36,000	4,800
Direct labor	14,400	16,800	42,000	7,200
Applied overhead	?	?	?	?

At the end of the year, Job 03, Job 04, Job 05, were completed. The predetermined overhead rate was 65% of direct labor cost. Actual overhead at the end of the year was P33,000.

9. What is the cost of goods manufactured at the end of the year?
 - a. 180,900
 - b. 143,700
 - c. 195,492
 - d. 180,912
10. What is the cost of goods manufactured for Job 03?
 - a. 105,300
 - b. 43,020
 - c. 47,172
 - d. 103,300
11. What is the cost of goods manufactured for Job 04?
 - a. 40,920
 - b. 42,300
 - c. 43,020
 - d. 47,172
12. What is the cost of goods manufactured for Job 05?
 - a. 8,340
 - b. 57,600
 - c. 34,680
 - d. 105,300
13. Assuming Job 06 was also completed, what is the cost of goods manufactured of Job 06?
 - a. 16,680
 - b. 6,252
 - c. 20,580
 - d. 40,920
14. At the end of 2021, Saturnina Company's total assets was P500,000. In 2022, it earned net income of P30,000 and paid dividends of P10,000. What is the company's internal growth rate?
 - a. 1%
 - b. 4%
 - c. 5%
 - d. 9%
15. Belle Corporation provided the following data are for the year ended Dec. 31, 2021:

Net credit sales	P576,000
Average materials inventory	8,000
Average finished goods inventory	12,000
Average accounts receivable	80,000
Average accounts payable	5,000
Net credit purchases	120,000
Raw materials used	96,000
Gross profit rate	25%
Number of days in a year	360 days

What is the average number of days in the company's operating cash conversion cycle?

- a. 50 days
- b. 75 days
- c. 105 days
- d. 45 days

16. Andy Co. produces Component X for use in one of its electronic gadgets. Normal annual production for the item is 100,000 units. The costs per 100 units-lot of the component are as follows:

Direct materials		P520.00
Direct labor		200.00
Manufacturing overhead:		
Variable	P240.00	
Fixed	320.00	560.00
Total manufacturing costs per 100 units		1,280.00

Boe, Inc. has offered to sell Andy all the 100,000 units it will need during the coming year for P1,200 per 100 units. If Andy accepts the offer from Boe, the facilities used to manufacture Component X could be used in the production of Component Y. this change would save Andy P180,000 in relevant costs. In addition, a P200,000 cost item included in fixed overhead that is specifically related to Component X would be eliminated. Gwen should:

- a. Buy Component X because of P300,000 savings.
- b. Buy Component X because of P140,000 savings.
- c. Continue producing Component x because of P40,000 savings.
- d. Continue producing Component X because of P60,000 savings.

17. Loraine, Inc. is along the highway leading to Chocolate Hills. Sophia has a stall which specializes in hand crafted fruit baskets that sell for P60 each. Daily fixed costs are P15,000 and variable costs are P30 per basket. An average of 750 baskets are sold each day. Sophia has a capacity of 800 basket per day. By closing time yesterday, a bus load of stopped by Sophia's stall.

Collectively, they offered Sophia P1,500 for 40 baskets. Sophia should have:

- a. Rejected the offer since she could have lost P500.
- b. Rejected the offer since she could have lost P900.
- c. Accepted the offer since she could have P300 contribution margin.
- d. Accepted the offer since she could have P700 contribution margin.

18. An individual receives an income of P3,000 per month, and spends P2,500. An increase in income of P500 per month occurs, and the individual spends P2,800. The individual's marginal propensity to save is

- a. 0.2
- b. 0.4
- c. 0.6
- d. 0.8

For the next two items:
Health Conscious, Inc. is planning to open a spa in the city. A market study conducted by an independent market researcher shows the following estimates of the number of clients (and their probabilities) during a period:

Number of Clients	Probabilities
0 - 40	10%
41 - 80	40%
81 - 120	30%
121 - 160	20%

19. What is the probability of having between 81 to 160 clients in the spa during the period?

- a. 30%
- b. 20%
- c. 50%
- d. 25%

20. What is the best estimate of the expected number of clients in the spa during the period?
- a. 84
 - b. 104
 - c. 80
 - d. 65
21. In CPM, crashing the network means
- a. Abandoning the entire project for practical reasons.
 - b. Finding the minimum cost for completing the project in minimum time.
 - c. Minimizing the number of activities in the project.
 - d. Working overtime to complete a non-critical path earlier than expected.

For the next two items:

RTC Company, which operates a school canteen, is planning to buy a doughnut-making machine for P300,000. the machine is expected to produce 36,000 units of doughnuts per year which can be sold for P10 each. Variable cost to produce and sell the doughnut is P4 per unit. Incremental fixed costs, exclusive of depreciation, is estimated at P56,000 per year. The doughnut-making machine will be depreciated on a straight-line basis for 5 years to a zero salvage value. The company pays income tax at a rate of 25%.

22. What is the expected annual return (accounting net income) to be earned from the doughnut making machine?
- a. P120,000
 - b. P135,000
 - c. P100,000
 - d. P75,000
23. What is the annual net cash inflows from the doughnut-making machine?
- a. P120,000
 - b. P135,000
 - c. P100,000
 - d. P75,000

For the next two items:

At the beginning of the year, Abby Corporation purchased a new equipment for P360,000. The machine has an estimated useful life of four (4) years with no salvage value. It is expected to produce cash flows from operations, net of income taxes of 32%, as follows:

Year 1	P192,000
2	168,000
3	216,000
4	144,000

Abby Corporation uses the sum-of-the-year-digits method (SYD) in computing depreciation of its depreciable assets. Using SYD, the new equipment will be depreciated as follows:

Year 1	(P360,000 x 4/10)	P144,000
2	(P360,000 x 3/10)	108,000
3	(P360,000 x 2/10)	72,000
4	(P360,000 x 1/10)	36,000

The company's cost of capital is 10%. The present value factors at 10% are as follows:

End of Year 1	0.909
2	0.826
3	0.751
4	0.683
Total, 4 years	3.170

24. What is the net present value of the equipment?
- P512,628
 - P298,764
 - (P84,900)
 - P213,864
25. If Abby Corporation used the straight-line method of depreciation instead of the SYD method, the net present value provided by the equipment would increase (decrease) by:
- P18,675
 - (P18,675)
 - (P3,366)
 - P3,366

For the next four items:

RTC Traders, Inc. needs P100,000 to pay a supplier's invoice for merchandise purchased with terms of 2/10, net 30. RTC Traders wants to pay on the 10th day of the credit term so it can avail of the 2% discount.

The funds needed can be raised by obtaining a short-term loan from a bank which agrees to grant a 30-day loan at 12% discounted interest per annum. The bank requires that a compensating balance of 10% be maintained in the borrower's non-interest earning deposit account.

26. The amount needed by Jem Traders to pay the invoice within the discount period is
- P98,000
 - P100,00
 - P9,000
 - P102,000
27. The principal amount of the loan that must be obtained from the bank to raise the needed fund is
- P110,112
 - P108,780
 - P112,360
 - P125,640
28. What is the effective interest rate of the loan?
- 12%
 - 22%
 - 10%
 - 13.48%
29. If RTC Traders fails to pay the discount and pays the account on the 30th day of the term, what is the annual cost of this non-free trade credit?
- 2%
 - 36.73%
 - 24%
 - 0
30. Chrysler Markets has a growth rate of 4.8 percent and is equally as risky as the market. The stock is currently selling for P17 a share. The overall stock market has a 10.6 percent rate of return and a risk premium of 8.7 percent. What is the expected rate of return on this stock?
- 8.7 percent
 - 9.2 percent
 - 10.6 percent
 - 11.3 percent

31. Yoga Fishing has a current beta of 1.48. The market risk premium is 8.9 percent and the risk-free rate of return is 3.2 percent. By how much will the cost of equity increase if the company expands its operations such that the company beta rises to 1.60?
- 0.88 percent
 - 1.07 percent
 - 1.50 percent
 - 2.10 percent
32. Jeremy's Landscaping has 1,200 bonds outstanding that are selling for P990 each. The company also has 2,500 shares of preferred stock at a market price of P28 a share. The common stock is priced at P37 a share and there are 28,000 shares outstanding. What is the weight of the common stock as it relates to the firm's weighted average cost of capital?
- 43.08 percent
 - 45.16 percent
 - 47.11 percent
 - 54.00 percent
33. The Market Outlet has a beta of 1.38 and a cost of equity of 14.945 percent. The risk-free rate of return is 4.25 percent. What discount rate should the firm assign to a new project that has a beta of 1.25?
- 13.54 percent.
 - 13.72 percent.
 - 13.94 percent.
 - 14.14 percent.
34. On an average day, Bote Enterprises writes 42 checks with an average amount of P587. These checks clear the bank in an average of 2 days. What is the average amount of the disbursement float?
- P1,174
 - P5,805
 - P24,654
 - P49,308
35. On average, your firm receives 62 checks a day from customers. These checks, on average, are worth P39.90 each and clear the bank in 1.5 days. In addition, your firm disburses 38 checks a day with an average amount of P89.50. These checks clear your bank in 2 days. What is the average amount of the collection float?
- P2,473.80
 - P3,401.00
 - P3,710.70
 - P5,101.50
36. The following year-end data pertain to BDC Corporation:
- | | |
|-----------------------------------|-----------|
| Earning before interest and taxes | P800,000 |
| Current assets | 800,000 |
| Non-current assets | 3,200,000 |
| Current liabilities | 400,000 |
| Non-current liabilities | 1,000,000 |
- BDC Corporation pays an income tax rate of 30%. Its weighted-average costs of capital is 10%. What is BDC Corporation's Economic Value Added (EVA)?
- P200,000
 - P160,000
 - P440,000
 - P400,000
- Net Profit
 Less : Required Profit(TA-CL)* COC

37. The following year-end data pertain to RMC Corporation:

	<u>Book Value</u>	<u>Fair Value</u>
Current assets	P800,000	
Non-current assets	3,200,000	
Current liabilities	400,000	
Non-current liabilities (8% interest rate)	1,000,000	1,000,000
Stockholders' equity	2,600,000	3,000,000

During the year, the company earned income before interest and taxes of P800,000. It pays income tax at the rate of 25%. Its cost of equity capital is 12%.

What is the company's Economic Value Added (EVA)?

- a. P240,000
 - b. P222,000
 - c. P180,000
 - d. P422,000
38. You are considering implementing a lockbox system for your firm. The system is expected to reduce the average collection time by 2.8 days. On an average day, your firm receives 2,419 checks with an average value of P1,287 each. The daily interest rate on Treasury bills is 0.016 percent. The bank charge per check is P0.30. What is the net present value of this lockbox arrangement?
- a. (P4,535,625)
 - b. (P2,611,575)
 - c. P187,419
 - d. P4,181,483

For the next three items:

The BSA Corporation is preparing to evaluate capital expenditure proposals for the coming year. Because the firm employs discounted cash flow methods, the cost of capital for the firm must be estimated. The following information for FLF Corporation is provided:

The market price of common stock is P60 per share.

The dividend next year is expected to be P3 per share.

Expected growth in dividends is a constant 10%.

New bonds can be issued at face value with a 10% coupon rate.

The current capital structure of 40% long-term debt and 60% equity is considered to be optimal.

Anticipated earnings to be retained in the coming year are P3 million.

The firm has a 40% marginal tax rate.

39. The after-tax cost of the new bond issue is
- a. 4%
 - b. 6%
 - c. 10%
 - d. 14%
40. The cost of using retained earnings for financing is
- a. 5%
 - b. 9%
 - c. 10%
 - d. 15%
41. If the company must assume a 20% flotation cost on new stock issuances, what is the cost of new common stock?
- a. 6.25%
 - b. 15%
 - c. 16.25%
 - d. 10%

42. The maximum capital expansion that can be supported in the coming year without resorting to external equity financing is
- a. P2 million.
 - b. P3 million.
 - c. P5 million.
 - d. Cannot determine from the information given.
43. Without prejudice to your answers from any other questions, assume that the after-tax cost of debt financing is 10%, the cost of retained earnings is 14%, and the cost of new common stock is 16%. If capital expansion needs to be P7 million for the coming year, what is the after-tax weighted-average cost of capital?
- a. 11.14%
 - b. 12.74%
 - c. 13.6%
 - d. 16%
44. Miggy Pet Foods manufactures two products, X and Y. The unit contribution margins for Products X and Y are P30 and P50, respectively. Each product uses Materials A and B. Product X uses 6 pounds of Material A and 12 pounds of Material B. Product Y uses 12 pounds of Material A and 8 pounds of Material B. The company can purchase only 1,200 pounds of Material A and 1,760 pounds of Material B. The optimal mix of products to manufacture is
- a. 146 units of X and 0 units of Y.
 - b. 0 units of X and 100 units of Y.
 - c. 120 units of X and 40 units of Y.
 - d. 40 units of X and 120 units of Y.
45. A company is considering three alternative machines to produce a new product. The cost structures (unit variable costs plus avoidable fixed costs) for the three machines are shown as follows. The selling price is unaffected by the machine used.

Single purpose machine	$P0.60x + P20,000$
Semiautomatic machine	$P0.40x + P50,000$
Automatic machine	$P0.20x + P120,000$

The demand for units of the new product is described by the following probability distribution.

Demand	Probability
200,000	0.4
300,000	0.3
400,000	0.2
500,000	0.1

- Ignoring the time value of money, the expected cost of using the semiautomatic machine is
- a. P170,000.
 - b. P130,000.
 - c. P210,000.
 - d. P250,000.

For the next three questions:
Nickson Invest Inc. uses a 12% hurdle rate for all capital expenditures and has done the following analysis for four projects for the upcoming year.

	Project 1	Project 2	Project 3	Project 4
Initial capital outlay	P 200,000	P 298,000	P 248,000	P 272,000
Annual net cash inflows:				
Year 1	P 65,000	P 100,000	P 80,000	P 95,000
Year 2	70,000	135,000	95,000	125,000
Year 3	80,000	90,000	90,000	90,000
Year 4	40,000	65,000	80,000	60,000
Net present value	(3,798)	4,276	14,064	14,662
Profitability index	98%	101%	106%	105%
Internal rate of return	11%	13%	14%	15%

46. Which project(s) should Nickson Invest Inc. undertake during the upcoming year assuming it has no budget restrictions?
- a. All of the projects.
 - b. Projects 1, 2, and 3.
 - c. Projects 2, 3, and 4.
 - d. Projects 1, 3, and 4.
47. Which project(s) should Nickson Invest Inc. undertake during the upcoming year if it has only P600,000 of funds available?
- a. Projects 1 and 3.
 - b. Projects 2, 3, and 4.
 - c. Projects 2 and 3.
 - d. Projects 3 and 4.
48. Which project(s) should Nickson Invest Inc. undertake during the upcoming year if it has only P300,000 of capital funds available?
- a. Project 1.
 - b. Projects 2, 3, and 4.
 - c. Projects 3 and 4.
 - d. Project 3.
49. If production is less than sales (in units), then absorption costing net income will generally be
- a. Greater than variable costing net income.
 - b. Less than variable costing net income.
 - c. Equal to variable costing net income.
 - d. Less than expected.
50. In CVP analysis, it is assumed that
- a. All costs are classifiable as either direct or indirect costs.
 - b. Cost and revenue relationships are predictable and linear over any range of activity.
 - c. Selling prices per unit and market conditions remain unchanged.
 - d. Total fixed costs are constant over the relevant range, but fixed costs per unit vary directly with the cost driver or volume.
51. Which of the following costs is not a product cost?
- a. Wages paid to workers for rework on defective products.
 - b. Wages paid to truck loaders who load finished goods onto outgoing delivery trucks.
 - c. Fringe benefits paid to factory workers.
 - d. Wages paid to workers for idle time due to machine breakdown in a production department.

52. In deciding whether to replace a machine, which of the following is NOT a sunk cost?
- The expected resale price of the existing machine.
 - The book value of the existing machine.
 - The original cost of the existing machine.
 - The depreciated cost of the existing machine.
53. Mixed costs are costs that have
- Variable and fixed costs components.
 - Manufacturing and administrative costs components.
 - Selling and administrative costs components.
 - Direct and indirect costs components.
54. It is the level of output or sales at which total revenues equal total costs, that is, the point at which operating income is zero.
- Indifference point
 - Break-even point
 - Sangley point
 - Order point
55. Which of the following is not correct?
- At break-even,
- Profit equals zero
 - Gross profit equals zero FC
 - Sales equals total costs
 - Fixed costs equals contribution margin
56. What costs are treated as product cost under variable costing?
- All variable costs
 - All direct costs only
 - All manufacturing costs
 - Only variable production costs
57. Profit under variable costing fluctuates with
- Sales only
 - Production only
 - Both sales and production
 - Neither sales nor production
58. It is the desire to attain a specific goal and the commitment to accomplish the goal.
- Goal congruence
 - Managerial effort
 - Motivation
 - Autonomy
59. Which of the following groups of capital budgeting techniques uses the time value of money?
- Book rate of return, payback, and profitability index.
 - IRR, payback, and NPV.
 - IRR, NPV, and profitability index.
 - IRR, book rate of return, and profitability index.
60. The profitability index
- does not use present values of cash flows.
 - is generally preferable to any other approach for evaluating mutually exclusive investment alternatives.
 - produces the same ranking of investment alternatives as does the IRR criterion.
 - is a discounted cash flow method.

61. A major difference between an investment in working capital and one in depreciable assets is that
 - a. an investment in working capital is never returned, while most depreciable assets have some residual value.
 - b. an investment in working capital is returned in full at the end of a project's life, while an investment in depreciable assets has no residual value.
 - c. an investment in working capital is not tax-deductible when made, nor taxable when returned, while an investment in depreciable assets does allow tax deductions.
 - d. because an investment in working capital is usually returned in full at the end of the project's life, it is ignored in computing the amount of the investment required for the project.
62. The proper treatment of an investment in receivables and inventory is to
 - a. ignore it.
 - b. add it to the required investment in fixed assets.
 - c. add it to the required investment in fixed assets and subtract it from the annual cash flows.
 - d. add it to the investment in fixed assets and add the present value of the recovery to the present value of the annual cash flows.
63. An investment with a positive NPV also has
 - a. a positive profitability index.
 - b. a profitability index of one.
 - c. a profitability index less than one.
 - d. a profitability index greater than one.
64. The cash inflow from the return of an investment in working capital is
 - a. adjusted for taxes due.
 - b. discounted to present value.
 - c. ignored if any depreciable assets also involved in the project have no expected residual value.
 - d. not real.
65. A project that has a negative NPV
 - a. has a payback period longer than its life.
 - b. has a negative profitability index.
 - c. must be rejected.
 - d. doesn't necessarily fit any of the above descriptions.
66. Compared to other firms in the industry, a company that maintains a conservative working capital policy will tend to have a
 - a. Greater percentage of short-term financing.
 - b. Greater risk of needing to sell current assets to repay debt.
 - c. Higher ratio of current assets to fixed assets.
 - d. Higher total asset turnover.
67. The following are desirable in cash management except:
 - a. Cash is collected at the earliest time possible.
 - b. Most sales are on cash basis and receivables are aged "current"
 - c. Post-dated checks are not deposited on time upon maturity.
 - d. All sales are properly receipted and promptly deposited intact.
68. A high turnover of accounts receivable, which implies a very short days-sales outstanding, could indicate that the firm
 - a. Has a relaxed (lenient) credit policy.
 - b. Offers small discounts.
 - c. Uses a lockbox system, synchronizes cash flows, and has short credit terms.
 - d. Has an inefficient credit and collection department.

69. Which of the following costs should consider the tax shield effect in computing the costs of capital?
- a. Cost of debt
 - b. Cost of common stock
 - c. Cost of preferred stock
 - d. Cost of retained earnings
70. Dividend yield multiplied by price-earnings ratio
- a. Pay-out ratio
 - b. Retention ratio
 - c. Equity ratio
 - d. Earnings per share

----- END OF EXAMINATION -----