

| PROGRAM | NATIONAL DIPLOMA ENGINEERING: INDUSTRIAL |
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| SUBJECT | INDUSTRIAL A CCOUNTING III |
| CODE | BBB 341 |
| DATE | SUMMER SSA EXAMINATION 2020 <br> 7 JANUARY 2020 |
| DURATION | : (SESSION 1) |
| WEIGHT | $40: 60$ |
| TOTAL MARKS | 100 |


| ASSESSOR | $:$ Ms R. MOUCHOU |
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| MODERATOR | $:$ |
| NUMBER OF PAGES | $:$ |

## INSTRUCTIONS TO STUDENTS

PLEASE ANSWER ALL QUESTIONS.
ANSWER THE QUESTIONS IN SEQUENCE

## REQUIREMENTS

ONLY ONE POCKET CALCULATOR PER CANDIDATE MAY BE USED.

## Question 1

1. The financial statement showing a firm's accounting value on a particular date is the:
a. income statement.
b. balance sheet.
c. statement of cash flows.
d. tax reconciliation statement.
e. shareholders' equity sheet.
2. A current asset is:
a. an item currently owned by the firm.
b. an item that the firm expects to own within the next year.
c. an item currently owned by the firm that will convert to cash within the next 12 months.
d. the amount of cash on hand the firm currently shows on its balance sheet.
e. the market value of all items currently owned by the firm.
3. The long-term debts of a firm are liabilities:
a. that come due within the next 12 months.
b. that do not come due for at least 12 months.
c. owed to the firm's suppliers.
d. owed to the firm's shareholders.
e. the firm expects to incur within the next 12 months.
4. Net working capital is defined as:
a. total liabilities minus shareholders' equity.
b. current liabilities minus shareholders' equity.
c. non-current assets minus long-term liabilities.
d. total assets minus total liabilities.
e. current assets minus current liabilities.
5. A(n) ___ asset is one which can be quickly converted into cash without significant loss in value.
a. current
b. non-current
c. intangible
d. liquid
e. long-term
6. Financial leverage refers to the:
a. amount of debt used in a firm's capital structure.
b. ratio of retained profits to shareholders' equity.
c. ratio of share premium to shareholders' equity.
d. ratio of cost-of-goods-sold to total sales.
e. amount of receivables present in the firm's asset structure.
7. The common set of standards and procedures by which audited financial statements are prepared is known as the:
a. matching principle.
b. cash flow identity.
c. Generally Accepted Accounting Principles (GAAP).
d. Freedom of Information Act (FOIA).
e. International Accounting Standards.
8. The financial statement summarizing a firm's performance over a period of time is the:
a. income statement.
b. balance sheet.
c. statement of cash flows.
d. tax reconciliation statement.
e. shareholders' equity sheet.
9. Non-cash items refer to:
a. the credit sales of a firm.
b. the accounts payable of a firm.
c. the costs incurred for the purchase of intangible fixed assets.
d. expenses charged against revenues that do not directly affect cash flow.
e. all accounts on the balance sheet other than cash on hand.
10. Your $\qquad$ tax rate is the amount of tax payable on the next taxable rand you earn.
a. deductible
b. residual
c. total
d. average
e. marginal
11. Your $\qquad$ tax rate measures the total taxes you pay divided by your net profit after tax.
a. deductible
b. residual
c. total
d. average
e. marginal
$\qquad$ refers to the cash flow that results from the firm's ongoing, normal business activities.
a. Operating cash flow
b. Capital spending
c. Net working capital
d. Cash flow from assets
e. Cash flow to lenders
12. $\qquad$ refers to the net expenditures by the firm on non-current asset purchases.
a. Operating cash flow
b. Capital spending
c. Net working capital
d. Cash flow from assets
e. Cash flow to lenders
13. $\qquad$ refers to the difference between a firm's current assets and its current liabilities.
a. Operating cash flow
b. Capital spending
c. Net working capital
d. Cash flow from assets
e. Cash flow to lenders
14. $\qquad$ refers to the net total cash flow of the firm available for distribution to its lenders and shareholders.
a. Operating cash flow
b. Capital spending
c. Net working capital
d. Cash flow from assets
e. Cash flow to creditors
15. $\qquad$ refers to the firm's interest payments less any net new borrowing.
a. Operating cash flow
b. Capital spending
c. Net working capital
d. Cash flow from assets
e. Cash flow to lenders
16. $\qquad$ refers to the firm's dividend payments less any net new equity raised.
a. Operating cash flow
b. Capital spending
c. Net working capital
d. Cash flow from assets
e. Cash flow to shareholders
17. Cash flow from assets is also known as the firm's:
a. capital structure.
b. equity structure.
c. hidden cash flow.
d. free cash flow.
e. historical cash flow.
18. Earnings per share is equal to:
a. net profit after tax divided by the total number of shares outstanding.
b. net profit after tax divided by the par value of the ordinary shares
c. gross income multiplied by the par value of the ordinary shares
d. operating profit divided by the par value of the ordinary shares.
e. net profit after tax divided by total shareholders' equity.
19. Dividends per share is equal to dividends paid:
a. divided by the par value of ordinary shares
b. divided by the total number of shares outstanding.
c. divided by total shareholders' equity.
d. multiplied by the par value of the ordinary shares
e. multiplied by the total number of shares outstanding.
(40 marks)

## Question 2

2.1 Sing Lee's has accounts payable of R300, inventory of R250, cash of R50, noncurrent assets of R500, accounts receivable of R200, and long-term debt of R400. What is the value of the net working capital to total assets ratio?
2.2 A firm has sales of R3 600, costs of R2 800, interest paid of R100, and depreciation of R 400 . The tax rate is 34 per cent. What is the value of the cash coverage ratio?
2.3 Freda's, Inc. has sales of R3 200, current liabilities of R900, total assets of R3 000, and net working capital of R500. How many rands worth of sales are generated from every R1 in net non-current assets?
2.4 Samuelson's has a debt-equity ratio of 40 per cent, sales of R8 000, net profit after tax of R600, and total debt of R2 400. What is the return on equity?
(10 Marks)

## Question 3

3.1 One year ago, you invested R3 000. Today it is worth R3 142.50. What rate of interest did you earn?
3.2 Ten years ago, Joe invested R5 000. Five years ago, Marie invested R2 500. Today, both Joe and Marie's investments are each worth R8 500 . Which investment has a higher return?
3.3 You want to have R10 000 saved ten years from now. How much less do you have to deposit today to reach this goal if you can earn 6 per cent rather than 5 per cent on your savings? (3)
3.4 Today you earn a salary of R28 500. What will be your annual salary fifteen years from now if you earn annual raises of 3.5 per cent?
(10 marks)

## Question 4

4.1 You have a sub-contracting job with a local manufacturing firm. Your agreement calls for annual payments of R50 000 for the next five years. At a discount rate of 12 per cent, what is this job worth to you today?
4.2 The Ajax Co. just decided to save R1 500 a month for the next five years as a safety net for recessionary periods. The money will be set aside in a separate savings account which pays 3.25 per cent interest compounded monthly. They deposit the first

R1 500 today. If the company had wanted to deposit an equivalent lump sum today, how much would they have had to deposit?
4.3 You just won the lottery! As your prize you will receive R1 200 a month for 100 months. If you can earn 8 per cent on your money, what is this prize worth to you today?
(10 marks)

## Question 5

5.1 The bonds issued by Jensen \& Son bear a 6 per cent coupon, payable semi-annually. The bond matures in 8 years and has a R1 000 face value. Currently, the bond sells at par. What is the yield to maturity?
5.2 Buti's Co. offers a zero coupon bond with an 11.3 per cent yield to maturity. The bond matures in 16 years. What is the current price of a R1 000 face value bond?
5.3 The zero coupon bonds of Markco, Ltd. have a market price of R394.47, a face value of R1 000, and a yield to maturity of 6.87 per cent. How many years is it until this bond matures?
(10 marks)

## Question 6

6.1 What is the net present value of a project with the following cash flows and a required return of 12 per cent?

| Year | Cash Flow |
| :---: | :---: |
| 0 | -R28 900 |
| 1 | R12 450 |
| 2 | R19 630 |
| 3 | R 2750 |

6.2 You are considering two independent projects with the following cash flows. The required return for both projects is 10 per cent. Calculate the internal rate of return and the net present value of the two projects?

| Year | Project A | Project B |
| :---: | :---: | :---: |
| 0 | -R950 000 | -R125 000 |
| 1 | R330 000 | R 55000 |
| 2 | R400 000 | R 50000 |
| 3 | R450 000 | R 50000 |

Since these are independent projects and both the IRR and NPV rules say accept, you should accept both projects if there are sufficient funds to do so.
6.4 A project has an initial cost of R38 000 and a four-year life. The company uses straight-line depreciation to a book value of zero over the life of the project. The projected net profit after tax from the project is R1 000, R1 200, R1 500, and R1 700 a year for the next four years, respectively. What is the average accounting return?
6.5 The Winston Co. is considering two mutually exclusive projects with the following cash flows. Calculate the crossover rate. Which project should be accepted.

| Year | Project A Project B <br> Cash Flow | Cash Flow |
| :--- | :---: | :---: |
| 0 | - R75 000 | -R60 000 |
| 1 | R30 000 | R25 000 |
| 2 | R35 000 | R30 000 |
| 3 | R35 000 | R25 000 |

