NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF INDUSTRIAL TECHNOLOGY

Bachelor of Engineering (Hons) Degree Industrial \& Manufacturing Engineering BUSINESS STUDIES IV- FINANCIAL ANALYSIS

TIE 5205
Second Semester Main Examination Paper
April/May 2015

This examination paper consists of 12pages

Time Allowed: 3 hours
Total Marks: 100
Special Requirements: Calculators

## INSTRUCTIONS

1. Answer all questions.
2. Use the examination answer book provided.
3. Use black or blue pen.

Classify the following items into current assets, non-current assets, liabilities, non-current liabilities, equity, income or expenses, and also state the financial statement each of the following items will be reported on.
a. Sale of goods for cash
b. Amounts receivable due to credit sales
c. Rent paid for office premises
d. Amounts payable to credit suppliers
e. Purchase of goods
f. Acquisition of a building
g. Travel expenses
h. Printing charges
i. Corporate tax paid
j. Profit from sale of equipment
k. Interest paid

1. Interest received
m. Purchase of plant and equipment
n. Cash received from owners
2. Bank loans
p. Furniture received from owners
q. Inventories in stock
r. Profit for the period
s. Cash drawings by a sole trader
t. Computers used by employees

## QUESTION 2

[30 MARKS]
(a) Z Ltd has a $7 \%$ return on total assets of $\$ 450,000$ and an operating profit margin of $5 \%$.

Calculate the sales of the company.
A \$630 $000 \quad$ B $\$ 321428$ C $\$ 472500 \mathbf{C} \$ 1500000$
(b)Which of the following would not improve the current ratio?
(i) Borrow short term loan to finance purchase of fixed assets.
(ii) Issue long-term loan to purchase inventories.
(iii) Sell inventory to reduce current liabilities.
(iv) Dispose the fixed assets in order to reduce accounts payable.

A all the above $\mathbf{B}$ (i) $\mathbf{C}$ (i), (ii) and (iv) $\mathbf{D}$ (iv)
(c)The financial statements of P Ltd show that the gross profit margin has not changed in comparison to the previous year. However the net profit margin has declined considerably over the period.

Which of the following could be the reason for the decline in net profit margin?
(i) The cost of goods sold has increased, whereas the sale price has remained constant.
(ii) The finance cost has increased in comparison to the last year.
(iii) The tax authorities have increased the tax rate.
(iv) The company has declared dividends during the year.
$\mathbf{A}$ (i) $\mathbf{B}$ (iv) $\mathbf{C}$ (ii) and (iii) $\mathbf{D}$ non of the above
(d) Which of the following statement(s) is / are correct?
(i) A lower receivables turnover is always desirable.
(ii) An increase in net profit margin without any change in revenue or assets indicates a weaker return on investments (ROI).
(iii) The interest coverage ratio will be lower if the tax rate of the firm is higher.
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(iv) The lower the total debt-to-equity ratio, the lower the financial risk for a firm.
A all of the above B
B (iii)
$\mathbf{C}$ (ii) and (iii) D (iv)
(e)Which of the following factors would result in higher gearing?
(i) an upward revaluation of non-current assets.
(ii) a bonus issue of shares to the existing shareholders.
(iii) obtaining long term loan to finance purchase of non-current assets.
A all of the above
B (i) and (ii)
C (i)
(f)The following would result in the increase in the gearing ratio of the company:
(i) The decrease in long term loans is less than the decrease in the equity capital.
(ii) The increase in long term loans is less than the increase in the equity capital.
(iii) The interest rates in the markets rise.
(iv) The company declares dividends during the year.

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\mathbf{A} \text { (i) } \mathbf{B} \text { (ii),(iii) and (iv) } \mathbf{C} \text { (ii) } \mathrm{D} \text { none of the above }
$$

(g) The net accounts receivable were $\$ 250,000$ as of 31 December, 20X7, and $\$ 300,000$ as of31 December, 20X8. Net cash sales for 20X8 were $\$ 100,000$. The receivable days for 20 X 8 were 73 days.
What were the company's total net sales for 20X8? (Assume 365 days in a year)
A $\$ 1,500,000 \quad$ B $\$ 1,475,000 \quad$ C $\$ 1,375,000 \quad$ D $\$ 1,250,000$
(h) G Ltd has issued 4,500,000 equity shares at $\$ 10$ each. The following is the data provided for G Ltd:

| Dividends | $\$ 4,500,000$ |
| :--- | :--- |
| Market price per share | $\$ 20$ |
| Earnings per share | $\$ 5$ |

The dividend per share, dividend yield will be:

## Dividend Dividend

per share yield
A $\$ 10 \quad 5 \%$
B $\$ 1 \quad 25 \%$
C $\$ 1 \quad 5 \%$
D $\$ 1$ 20\%
(i)Jupiter Ltd had net income of $\$ 200,000$, paid income taxes of $\$ 60,000$ and had interest expense of \$16,000.

Calculate the interest coverage ratio of Jupiter Ltd.

## A 17.25 B 7.75 C 15.25 D 8.75

(j)The following information is provided for Saturn Ltd:

## \$'000

| Cost of good sold | 12,000 |
| :--- | :--- |
| Average inventory | 4,000 |
| Net sales | 16,000 |
| Average receivables | 6,000 |
| Net income | 2,000 |

Calculate the inventory turnover ratio.
A 4.00 times B 2.67 times C 3.50 times D3.00 times
(k) Below are the extracts of Zodiac Ltd's SOFP and SOCI (income statement):

| SOFP as at 30 June 20X6 |  |
| :--- | :--- |
|  | \$m |
| Non-current assets | 13 |
| Current assets | 17 |
|  | 30 |
| Ordinary share capital | 9 |
| Share premium account | 6 |
| Retained earning | 5 |
| Total equity and reserves | 20 |
| 10\% Loan notes | 5 |
| Current liabilities | 5 |
|  | 30 |


| SOCI (Income Statement) for the <br> year ended 30 June 20X6 |  |
| :--- | :--- |
| Operating profit <br> Finance costs <br> Profit for year | 10 |
|  | $(5)$ |
|  | 5 |
|  |  |

Using the information, choose the correct calculation of return on total capital employed (ROCE)?[2]

A $5 / 20=25 \%$
B $10 / 20=50 \%$
C $5 / 25=20 \%$
D $10 / 25=40 \%$
(I)A company's gearing ratio would go down if the:

A market interest rates goes up
B number of shareholder of company's increases
C decrease in long-term loans is less than a decrease in equity for the company
D decrease in long-term loans is more than a decrease in equity for the company
(m)On 31 December 20X9, Silicon ltd, a pharmaceutical co extracted following details from its SOFP.

|  | $\$ / 000$ |
| :--- | :--- |
| Inventories | 2,500 |
| Receivables | 650 |
| Bank overdraft | 50 |
| Payables | 800 |

From the above information, one of its executive of the company prepared a report on liquidity position of company. Current ratio of a similar company working in the same industry is 2.1:1.
Which of the followings can be a possible result from his report?
A Liquidity is well controlled, because its quick assets are more than its current liabilities.
B Liquidity is poorly controlled, because its current ratio is significantly higher.
C Liquidity is poorly controlled, because it has a bank overdraft which less than payables figure.
D Liquidity is well controlled, because the current assets are much more than current liabilities.
(n)Fox Sports Entertainment Ltd's income statement for the year ended 31 December 20X9 showed thefollowing:

|  | $\$ \mathbf{0 0 0}$ |
| :--- | :--- |
| Operating profit | 2,200 |
| Interest | 400 |
| Profit before tax | 1,800 |
| Income tax | 600 |
| Profit for the period | $\mathbf{1 , 2 0 0}$ |

Its SOFP extracts at 31 December 20X8 showed the following:

|  | $\$, 000$ |
| :--- | :--- |
| Share capital | 7,000 |
| Retained earnings | 1,000 |
|  | 8,000 |
| $10 \%$ debenture | 2,000 |
|  | $\mathbf{1 0 , 0 0 0}$ |

From the above what is the return on average capital employed (ROCE) for the year ended 31 December 20X9 for the company?
A 11.54\% B 10.71\%
C 07.69\%
D 12.00\%
(o)Mr Robert is a vendor of cotton goods. On 31 Dec 200X9, he extracted following information from the income statement of his business.

|  | $\$$ | $\$$ |
| :--- | :--- | :--- |
| Sales |  | 105,000 |
| Opening inventory | 10,000 |  |
| Add: Purchases | 75,000 |  |
| Less: Closing inventory | $(18,200)$ | $(66,800)$ |
| Gross profit |  | 38,200 |

Calculate the inventory turnover ratio for his business for the year end 20X9?
[2]
A 2.71 timesB 7.44 times C1.30 times
D 4.74 times

Using the information given below attempt $\mathbf{Q} \mathbf{p}, \mathbf{Q} \mathbf{q}$ and $\mathbf{Q} \mathbf{r}$
Pioneer services Ltd extracted following information from its SOFP as on 31 December 20X8.

| Assets | $\$$ |
| :--- | :--- |
| Non-current assets: |  |
| Land and building | 500,000 |
| Current assets: | 80,000 |
| Inventory | 220,000 |
| Trade receivables | 800,000 |
|  |  |
| Equity and liabilities | 120,000 |
| Equity | 240,000 |
| Non-current liabilities | 150,000 |
| Secured loans | 290,000 |
| Current liabilities: | 800,000 |
| Trade payables |  |

Additional information: Sales and purchases for the year are $\$ 500,000$ and $\$ 350,000$ respectively. Assume 365 days in a year.
(p)Calculate the inventory turnover days and receivable days

|  | Inventory turnover days | Receivable days |
| :--- | :--- | :--- |
| A | 83 days | 229 days |
| B | 161 days | 58 days |
| C | 58 days | 161 days |
| D | 229 days | 83 days |

(q)Calculate the quick ratio and current ratio

|  | Quick <br> ratio | Current <br> ratio |
| :--- | :--- | :--- |
| A | 0.50 | 0.68 |
| B | 0.25 | 0.72 |
| C | 0.65 | 1.20 |
| D | 1.20 | 0.30 |

(r) Based on the ratios calculated above, which of the following statement/s are true
(i) The credit policy in the company is lenient.
(ii) The company will not be in a position to pay its liabilities on the due date.
(iii) The company is highly liquid.
(iv) The company has a shorter working capital cycle.

A (i) and (ii) B (i), (ii) and (iii) C (i) and (iv) D (i) and (iii)
(s) Which of the following is not a qualitative characteristic of financial reporting?
A Reliability B Comparability C Going concern D Relevance

## QUESTION 3 [20 MARKS]

T is a medium-sized company that manufactures luxury goods for several well-known chain stores. In real terms, the company has experienced only a small growth in revenue in recent years, but it has managed to maintain a constant, if low, level of reported profits by careful control of costs. It has paid a constant nominal (money terms) dividend for several years and its managing director has publicly stated that the primary objective of the company is to increase the wealth of shareholders. T is financed as follows:

|  | \$m |
| :--- | :---: |
| Overdraft | $1 \cdot 0$ |
| 10 year fixed interest bank loan | $2 \cdot 0$ |
| Share capital | 4.5 |
|  | $\mathbf{7 . 5}$ |

T has the agreement of its existing shareholders to make a new issue of shares on the stock market but has been informed by its bank that current circumstances are unsuitable. The bank has stated that if new shares were to be issued now they would be significantly under-priced by the stock market, causing T to issue many more shares than necessary in order to raise the amount of finance it requires. The bank recommends that the company waits for at least six months before issuing new shares, by which time it expects the stock market to have become strong-form efficient.

The financial press has reported that it expects the Central Bank to make a substantial increase in interest rate in the near future in response to rapidly increasing consumer demand and a sharp rise in inflation. The financial press has also reported that the rapid increase in consumer demand has been associated with an increase in consumer credit to record levels.

## Required:

(a)Briefly explain the nature and purpose of the ZimbabweStock Exchange.
(b)Discuss the possible advantages for a company of obtaining a listing on a stock exchange.

## Financial markets play an important role in a country's economy.

(c) Describe the role of a financial intermediary list four examples of financial intermediaries.
(d) Name the different financial markets and briefly explain their role within the economy.

## QUESTION 4

[30 MARKS]
(a) For which of the following is an investment centre manager responsible?
A Revenues only
B Return on investment only
C Costs and profits
D All of the above
(b) Monthly variance reports are an example of which one of the following types of management information?
A Tactical
B Strategic
C Planning
D Operational
(c)Which of the following is an initial requirement of a management control system?

A Establishing the standard to
be achieved
B Measuring the actual performance
C Setting organisational objectives
D Taking appropriate corrective action
(d)For a decision to be taken on an increase in sales, from $\$ 20$ million to $\$ 25$ million, the relevant data will be

A The information on the possible new areas where sales can be increased
B The information on the increase in the production capacity that can be achieved $\mathbf{C}$ The data on the availability of the raw materials in the market
D All of the above
(e) Reginald is the manager of production department $M$ in a factory which has ten other production departments. He receives monthly information that compares planned and actual expenditure for department M. After department M, all production goes into other factory departments to be completed prior to being dispatched to customers. Decisions involving capital expenditure in department M are not taken by Reginald.

Which of the following describes Reginald's role in department M?
A cost centre managerB An investment centre manager C A profit centre manager
D A revenue centre manager
(f)The following statements relate to financial accounting or to cost and management accounting:
(i) The main users of financial accounting information are external to an organisation. TIE 5205
(ii) Cost accounting is part of financial accounting and establishes the costs incurred by an organisation.
(iii)Management accounting is used to aid planning, control and decision making.

Which of the statements are correct?
A (i) and (ii) only
B (i) and (iii) only
C (ii) and (iii) only
D (i), (ii) and (iii)
(g) Which of the following is a management accounting function?

A The preparation of an analysis report on the areas of cost control
B To apply the costs incurred to the products
C To prepare the profit statement for the previous month
D To apportion the costs to the various products
(h) Cost accounting is used extensively in the manufacturing industries as

A These are sensitive to costs and hence costs need to be monitored closely
B These incur high production costs
C These are required to maintain cost records to continue with production
D These are industries with highly fluctuating costs and therefore need to keep track of the cost behaviour
(i)The following relate to cost and management accounting functions. Which one is a purely costaccounting function?

A Analysis of information on the data collected for consumption of a particular snack item and preparation of reports on estimated costs involved on the basis of past data
B The allocation of overheads to the various production cost centres
C The preparation of a feasibility report on the possibilities of an expansion The recording of costs for various products and arriving at an appropriate conclusion on the estimated costs for the additional order to be fulfilled
(j) Which of the following information requirements will be fulfilled by a management accounting system?

A Calculation of earnings per share
B Labour cost per unit of production
C Gearing ratio
D Sources and applications of funds statement
(k) Which of the following statement/s about managers is/are correct?
(i) Profit centre managers require information on capital invested and details of product profitability.
(ii) Cost centre managers require information on costs and revenues for which they are responsible.
(iii) Revenue centre managers need information only on costs of the products.

A (i) and (iii) only B (i) and (ii) only C(i), (ii) and (iii) D None of the above
(1) Material of minor importance in comparison to direct material is known as indirect material.

A True
B False
(m) Variable cost is known as 'stand-by-cost 'because this cost will be incurred even if no production activity takes place.

A True
B False
(n) Under traditional costing, costs are functionally classified as direct and indirect costs.

A A True
B B False
(o) In a manufacturing company, the major components of product cost are direct labour, indirect labour and non-manufacturing overheads.

## A True B False

(p)company incurs the following costs at various activity levels:

| Total cost <br> $\$$ | Activity level <br> Units |
| :---: | :---: |
| 250,000 | 5,000 |
| 312,500 | 7,500 |
| 400,000 | 10,000 |

Using the high-low method what is the variable cost per unit?
(q) A flexible budget is prepared for:

A One level of activity
B Range of activity levels
(r) Which of the following is not true regarding a budget?

A A budget is prepared and approved before commencement of the period under consideration.
B A budget statement is the action plan, used for controlling the organisational activities.

C A budget is a business plan, normally expressed in monetary terms. D A budget does not constitute any quantitative statement.
(s) Which of the following is the function of a budget?

A Planning
B Communicating
C Controlling
D All of the above.
(t) An imposed budget is one in which the budgeted quantities:

A Are obtained from lower level managers
B Are set by top level managers and communicated to lower level managers for approval $\mathbf{C}$ Are obtained from top level managers
D None of above
(u) Normally the time chosen for the budget period is:

A The accounting period for the organisation
B A short period of six months
C A long period
of five years
D None of the above
(v) Which of the following is true with reference to a master budget?

A It can be used to assess managerial efficiency
B It is a complete financial presentation of the operating plans of the entire organisation for the budget period
C It shows forecasted and actual results
DIt only reflects controllable cost
(w) Which of the following are the purposes of a budget?
(i) Establishing strategic options
(ii) Motivating management
(iii)Establishing long-term objectives
(iv)Planning operations

A (i) and (iii)
B (i) and (iv)
C (ii) and (iv)
D (ii), (iii) and (iv)
(x) Which of the following budgets is considered to be the original budget?

A Fixed budget
B Flexible budget
C Flexed budget
B Master budget
(y) What is a principal budget factor?

A A factor that can be controlled by the manager of a budget centre.
B A factor that restricts the volume of production or sales.
C A factor that is common to and affects the budget centres.
D A factor that comparatively has the highest unit cost.
(z) Which of the following budgets is expressed only in terms of quantities?

A Sales budget
B Material budget
C Production budget
D Flexible budget

