# National University of Science and Technology 

## FACULTY OF INDUSTRIAL TECHNOLOGY

DEPARTMENT OF INDUSTRIAL AND MANUFACTURING ENGINEERING

## $2{ }^{\text {nd }}$ SEMESTER MAIN EXAMINATION PAPER:

2013/2014
DATE:
APRIL 2014
SUBJECT: BUSINESS STUDIES IV: FINANCIAL ANALYSIS:TIE 5205
TIME ALLOWED:
THREE (3) HOURS
MARKS: 100

## INSTRUCTIONS TO CANDIDATES

1. Answer ALL questions
2. Use the examination book provided
3. Use black or blue pen
4. Begin each question on a new page and
5. Submit all answer books
[^0]1. Roger borrowed a sum of $\$ 58,000$ from Sandra for business purposes. How will this affect the accounting equations?

Alncrease in asset and decrease in liability
B Increase in asset and increase in liability
C Decrease in asset and decrease in liability
D Decrease in asset and increase in liability
2. A provider of finance is keen to know which of the following information?
(i) Profit or loss
(ii) Quality of goods supplied by the entity
(iii) Repayment capacity of loan principal
(iv) Ratio of interest to total expenditure
$\mathbf{A}$ (i) and (ii)B (iii) and (iv) C All of the above $\mathbf{D}$ None of the above
3. Which of the following will not appear in the SOFP?
(i) Share capital (ii) Proprietor's capital (iii) Audit fees (iv) Debentures
A (ii) and (iii)
B (iii)
C (v)
D (ii), (iii) and (iv)
4. Which of the following equations is correct?

A Total assets - Total liabilities =
Capital + Profit
B Total assets + Total liabilities $=$ Capital - Profit
C Total assets - Total liabilities = Capital - Profit
D Total assets + Total liabilities = Capital + Profit
5. Max wants to calculate his profit at the year end. Which equation should he use?

A Closing net assets + Drawings + Capital introduced - Opening net assets
B Closing net assets - Drawings + Capital introduced - Opening net assets
C Closing net assets - Drawings - Capital introduced - Opening
net assets
D Closing net assets + Drawings - Capital introduced - Opening net assets
6. Which of the following items may appear in a company's statement of changes in equity?
(i) Unrealised revaluation gains
(ii) Dividends paid
(iii) Proceeds of equity share issue
(iv) Profit for the period

A All of the above
B (ii), (iii) and (iv)
C (i), (iii) and (iv)
D (i), (ii) and (iv)
7. SOFP and SOCI are the two principal financial statements prepared by the companies.

With reference to these two financial statements, determine whether the following statements are correct.
(i) An asset is an amount owed by the business to someone else.
(ii) The SOFP is a snapshot of assets, liabilities and capital held by the business at a particular moment.
(iii) Capital is the amount that the business owes to its shareholders / owners.
(iv) The SOCI is a record of the income and expenditure of a business over a period of time.

A All of the above
B (i)
C (ii),(iii) and (iv)
D (ii) and (iv)
8. Which of the following accounting concepts applies to accruals and pre-payments? [1]

A Entity concept B Dual aspect concept Cost concept D Matching concept
9. Which of the following are the underlying assumptions of financial statements?

A Relevance and reliability
B Financial capital maintenance and physical capital maintenance
C Accrual basis and going concern
D Prudence and conservatism
10. When entities prepare financial statements assuming that the business is a going concern, the assets included in the financial statements would be the amount of cash or cash equivalents:
(i) paid or the fair value of the consideration given to acquire them at the time of their acquisition.
(ii) that could currently be obtained by selling the asset in an orderly disposal.
(iii) that would have to be paid if the same or an equivalent asset was acquired currently.

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A All of the above
B (i) and (ii)
C (ii) and (iii)
D (i) and (iii)
11. Which of the following is not a qualitative characteristic of financial reporting?
A Reliability B Comparability
C Going concern
D Relevance
12. The accounting concept which requires that all transactions and events should be recognised as and when they occur (and not as and when money is received or paid) and recorded in the financial statements of the periods to which they relate, is the: [1]

A Materiality concept B Prudence Consistency concept D None of the above
13. Which of the following statement(s) is/are not correct?
(i) The Framework is a financial reporting standard.
(ii) In the case of conflict between the Framework and a reporting standard, the Framework will prevail over the reporting standard.
A (i)
$B$ (ii)
C (i) and (ii)
D None of the above
14. The effect of the concept of accruals is that:

A ltems which are similar should be accounted for in a similar way from one accounting period to the next
B Losses should be provided for as soon as they are foreseen
C Net profit is the difference between revenues and expenses arising during the accounting period
D None of the above
15. If $\$ 1,000$ prepaid rent was incorrectly recorded as accruals, net profit is :

A Overstated by $\$ 2,000$ B Overstated by $\$ 1,000$ C Understated by $\$ 2,000$ D Understated by \$1,000
16. A company owns a number of properties which have been rented to tenants. The following information is available for the year ended 30 June 2013:

|  | Rent in advance | Rent in <br> arrears |
| :--- | :---: | :---: |
| 30 June 2012 | $\mathbf{\$}$ | $\mathbf{\$}$ |
| 30 June 2013 | 134,600 | 4,800 |
| 34,400 | 8,700 |  |

Cash received from the tenants for the year ended 30 June 2013 was $\$ 834,600$. All rent in arrears was subsequently received.

What figure should appear in the company's SOCI for rent received for the year ended 30 June 2013?

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$\square$
17. A company has sublet part of its offices. In the year ended 30 November 2011 the rent receivable was:

Until 30 June 2011
From 1 July 2011

$$
\begin{aligned}
& \$ 8,400 \text { per year } \\
& \$ 12,000 \text { per year }
\end{aligned}
$$

Rent was paid quarterly in advance on 1 January, April, July, and October each year.
What amounts should appear in the company's financial statements for the year ended 30 November 2011?

## SOCI Rent receivable

A $\$ 9,900$
B $\$ 9,900$
C $\$ 10,200$
D $\$ 9,900$

SOFP
\$2,000 in sundry payables $\$ 1,000$ in sundry payables $\$ 1,000$ in sundry payables $\$ 2,000$ in sundry receivables
18. The following information is available for Orset, a sole trader who does not keep full accounting records:

|  | $\$$ |
| :---: | :---: |
| Inventory 01/07/20X7 | 138,600 |
| 30/06/20X8 | 149,100 |
| Purchases for year ended 30/06/ 20X8 | 716,100 |

Based on these figures, what is Orset's sales figure for the year ended 30 June 20X8, if the gross profit on sales is $30 \%$ ?

19. A company sublets part of its office accommodation. In the year ended 30 June 2013 cash received from tenants was $\$ 83,700$.

Details of rent in arrears and in advance at the beginning and end of the year were:

|  | In arrears <br> $\$$ | In advance <br> $\$$ |
| :---: | ---: | :---: |
| $30 / 06 / 2012$ | 3,800 | 2,400 |
| $30 / 06 / 2013$ | 4,700 | 3,000 |

All arrears of rent were subsequently received.
What figure for rental income should be included in the company's SOCI for the year ended 30 June 2013?
$\square$
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20. D has a small business. He does not maintain full accounting records. The following details are available about the credit customers and suppliers for the year ended 31 December 2013:

|  | \$ |
| :--- | ---: |
| Trade receivables, 31 December 2012 | 32,500 |
| Trade payables, 31 December 2012 | 15,000 |
| Cash received from customers | 171,600 |
| Cash paid to suppliers | 75,700 |
| Discounts allowed | 350 |
| Discounts received | 740 |
| Contra between payables and receivables ledgers | 500 |
| Trade receivables, 31 December 2013 | 45,250 |
| Trade payables, 31 December 2013 | 21,000 |

What figure should appear in D's SOCI for the year ended 31 December 2013 for sales? [3]
$\square$
21. A company's gross profit percentage on sales has decreased by 5\% in 2013 compared with 2012.

Which one of the following matters could have caused the decrease?
A The level of sales in 2013 is lower than that of 2012.
B There have been more bad debts in 2013 than in 2012.
C Inventory at the end of 2013 is lying unused in inventory.
D The theft of inventory has increased.
22. Which of the following relationships is correct?

A Prepaid expense-current asset : Accrued expense - current liability
B Pre-paid expense -current liability: Accrued expense- current asset
C Accrued expense- current asset: Pre-received income - current asset
D None of the above

## 23. A non-current asset is:

(i) An asset whose value remains constant throughout its life.
(ii) An asset which is expected to have a life of atleast 3 years.
(iii) An asset whose expected life exceeds more than one accounting period and is used for business purpose, to earn profits.
(iv) A tangible asset whose life is expected to exceed one accounting period.

Which of the above mentioned statement(s) is / are true?
24. Which of the following will appear on the face of a company's statement of changes in equity?
(i) Surplus on revaluation of non-current assets
(ii) Share premium
(iii) Profit for the financial year

A All of the above $\quad \mathbf{B}$ (ii) and (iii) $\mathbf{C}$ (i) and (iii) $\quad \mathbf{D}$ (i) and (ii)
25. An SOCF consists of which of the following items?
(i) Interest received
(ii) Proceeds of the issue of shares
(iii) Dividends received
(iv)Proposed dividends
A (i), (ii) and (iii) $\mathbf{B}$ (ii), (iii) and (iv)
C (i) and (ii)
D (ii) and (iv)
26. State which of the following statements about the statement of cash flows is correct?

A A revaluation of a non-current asset will not affect cash flows
B A profit on disposal of non-current assets will cause an increase in cash from operating activities
27. Share premium is shown in the SOFP under:

A Share capital B Reserves C Current liabilities and provisions D Investments
28. Which of the following is a cash equivalent?

A Shares in a listed company
B Debentures in a listed company (maturing after three years)
C Commercial paper (maturing in one month)
D Investment in associates
29. Baker's Corner is a bakery. Which of the following items will be classified as an operating activity?
(i) Sale of cakes on credit
(ii) Sale of cakes for cash
(iii) Collection from credit customers
(iv)Sale of computers for cash
(v) Wages to workers

A (i), (ii), (iii) and (iv)
B (i), (ii), (iii) and (v)
C (ii), (iii), (iv) and (v)
D (i), (ii), (iii), (iv) and (v)
30. Which of the following items could appear in a company's SOCF?
(i) Proposed dividends

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(ii) Rights issue of shares
(iii) Bonus issue of shares
(iv)Repayment of loan

A (i) and (ii) B (ii) and (iv)C (i) and (iv)D (ii) and (iii)
31. Should transfer to various reserves from retained earnings be shown on the face of an entity's SOCI (income statement)?

A Yes
B No
32. If the opening inventory is overstated, the profit will be

A Cancelled B Understated C Overstated D Unchanged
33. Monica, after graduating from an Arts college, set up a new business. Her books of accounts recorded the following balances:

| Initial capital introduced | $\$ 15,000$ |
| :--- | :--- |
| Bank overdraft | $\$ 20,000$ |
| Vehicle | $\$ 16,000$ |

Her only other asset is office furniture. She has no other liabilities.
What is the book value of her office furniture?
$\square$
34. The following is the statement of financial position as at 31.12.2013 of Ikeo Ltd.

|  | $\$ \mathbf{\$}$ |
| :--- | ---: |
| Plant and machinery | 70,000 |
| Bank overdraft | 35,000 |
| Trade payables | 125,000 |
| Trade receivables | 380,000 |
| Cash | 35,000 |
| Prepayments | 26,000 |
| Accruals | 18,000 |
| Allowance for receivables | 22,000 |
| *Loan repayment on 31/12/2015 | 110,000 |

* Half of the loan would be repaid before the end of the reporting date.

What are Ikeo Ltd's net current assets at the year end?
$\square$
35. A limited liability company has the following balances:

|  | $\mathbf{\$}$ |
| :--- | :---: |
| Property, plant and equipment | 20,000 |
| Cash in bank | 10,000 |
| Bank overdraft | 15,000 |
| Term loan | 35,000 |
| Receivables | 11,000 |
| Payables | 19,000 |

What is the amount of capital in the business?
$\square$
36. Calculate the cash balance from the following information:
[ 2]

|  | $\mathbf{\$}$ |  | $\mathbf{\$}$ |
| :--- | ---: | :--- | ---: |
| Share capital | 50,000 | Trade payables | 6,000 |
| Share premium | 8,000 | Accrued expenses | 2,000 |
| Retained earnings | 5,000 | Inventory | 25,000 |
| Debentures | 10,000 | Cash | $?$ |

$\square$
37. Calculate the gross profit on sales from the following information:

|  | $\$$ |  | $\$$ |
| :--- | ---: | :--- | ---: |
| Sales | 150,000 | Supplier's closing balance | 15,000 |
| Opening inventory | 20,000 | Closing inventory | 20,000 |
| Cash purchases | 30,000 | Supplier's opening balance | 10,000 |
| Goods return to suppliers | 5,000 | Purchase expenses | 3,000 |
| Cash paid to suppliers | 50,000 | Selling expenses | 7,500 |

$\square$

## 38. Which of the following is not a selling and distribution expenditure?

A Running and maintenance cost of the delivery vehicle
B Salary paid to people in the sales department
C Advertisement expenditure
D Cost of primary packing
39. Jennifer is preparing her year end accounts. She has to deal with a pre-payment for rent that is included in the rent expense, appearing in the trial balance.

Which of the following statements are correct?
A The pre-payment will increase the charge in the SOCI.
$B$ The pre-payment will reduce the charge in the SOCI.
C The pre-payment has no effect on the SOCI.
D The pre-payment will only affect the SOCI.
40. The SOCI of Max Ltd shows a sale for $\$ 120,120$ with a mark-up of $20 \%$ on cost of sales.

What is the gross profit margin on the sales?
A 20\%
B 16.67\%
C $25 \%$ D None of the above
41. The following information has been extracted from the books of $S$ Ltd, a limited liability company, asat 31 December 2011.

| Ref |  | $\mathbf{D r}$ | $\mathbf{C r}$ |
| :--- | :--- | ---: | ---: |
|  |  | $\mathbf{\$ \prime 0 0 0}$ | $\mathbf{\$ \prime 0 0 0}$ |
| A | Cash | 32 |  |
| B | Inventory at 01/01/2010 | 400 |  |
| C | Energy expenses | 356 |  |
| D | Wages and salaries | 752 |  |
| F | Discounts received |  | 65 |
| G | Share premium account | 800 |  |
| H | Retained earnings at 01/01/2010 | 115 |  |
| I | Sales revenue |  | 4,565 |
| J | Land |  | 94 |
| K | Bank | 1,250 |  |
| L | Returns inward | 95 | 190 |
| M | Trade payables | 124 |  |
| N | Trade receivables | 4,370 |  |
| O | Purchases | 250 |  |
| P | Repair and maintenance |  | 1,800 |
| Q | Share Capital. (Ordinary shares $\$ 1$ each) |  |  |
|  |  | $\mathbf{7 , 6 2 9}$ | $\mathbf{7 , 6 2 9}$ |

(i) Calculate the current ratio for S
A 3.40
B 5.08
C 4.02
D 3.10
(ii) Calculatethe quick ratio for S .
A
3.40
B 0.68
C $\quad 0.55$
D 0.82
(iii) Based on the ratios calculated above, we can interpret that:
(1) Company`s management is efficient in fund management (2) Liquidity conditions suggest that company is not performing well. (3) Saturn`s fund management strategy is inefficient.
(4) Both the ratios are in tune with standard requirements
A 1 \& 4
B 2 \& 3
C 3
D 1
42. $Z$ 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 $\$ 630,000$ B $\$ 321,428$ C $\$ 472,500 \mathrm{D}$ \$1,500,000

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43. 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), (iii) and (iv)
D (iv)
44. 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.
A (i)
B (iv)
C (ii) and (iii)
D none of the above
45. 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.
(iv) The lower the total debt-to-equity ratio, the lower the financial risk for a firm.
A All of the above B
(iii)
(ii) and(iii)
D (iv)

## 46. 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 $\mathbf{B}$
(i) and (ii)
C (i)
D (iii)
47. 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.
A (i)
B (ii),(iii) and (iv)
C (ii) D none of the above
48. The net accounts receivable were $\$ 250,000$ as of 31 December, 2012, and $\$ 300,000$ as of31 December, 2013. Net cash sales for 2013 were $\$ 100,000$. The receivable days for 2013 were 73 days.

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What were the company's total net sales for 2013? (Assume 365 days in a year)
A \$1,500,000
B \$1,475,000
C $\$ 1,375,000$
D $\$ 1,250,000$
49. Greenwood Ltd has issued $4,500,000$ equity shares at $\$ 10$ each. The following is the data provided forGreenwood Ltd:

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

The dividend per share, dividend yield will be:

|  | Dividend <br> per share | Dividend <br> yield |
| :---: | :---: | :---: |
| A | $\$ 10$ | $5 \%$ |
| B | $\$ 1$ | $25 \%$ |
| C | $\$ 1$ | $5 \%$ |
| D | $\$ 1$ | $20 \%$ |

50. The following information is provided for Saturn Ltd:

|  | $\$ \mathbf{0 0 0}$ |
| :--- | ---: |
| 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
D 3.00 times
51. Below are the extracts of Zodiac Ltd's SOFP and SOCI (income statement):

| SOFP as at $\mathbf{3 0}$ June 2014 |  |
| :--- | :---: |
| Non-current assets | $\mathbf{\$ m}$ |
| Current assets | 13 |
| Ordinary share capital | 17 |
| Share premium account | 30 |
| Retained earning | 9 |
| Total equity and reserves | 6 |
| 10\% Loan notes | 5 |
| Current liabilities | 20 |
|  | 5 |
|  | 30 |

SOCI (Income Statement) for the year ended 30 June 2014

| Operating profit | 10 |
| :--- | :---: |
| Finance costs | $(5)$ |
| Profit for the year | 5 |

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Using the information, choose the correct calculation of return on total capital employed (ROCE)? (Tax ignored)
A $5 / 20=25 \%$
B $10 / 20=50 \%$
C $5 / 25=20 \%$
D $10 / 25=40 \%$
52. 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
53. On 31 December 2009, Silicon Itd, 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.
54. Fox Sports Entertainment Ltd's income statement for the year ended 31 December 2009 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 2008 showed the following:

|  | $\mathbf{\$ \prime 0 0 0}$ |
| :--- | ---: |
| 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 2009 for the company?

A11.54\%
B 10.71\%
C 07.69\%
D 12.00\%
55. Mr Robert is a vendor of cotton goods. On 31 Dec 2013, he extracted the 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 |  | $\mathbf{3 8 , 2 0 0}$ |

Calculate the inventory turnover ratio for his business for the year end 2013?
A 2.71 times
B 7.44 times
C 1.30 times
D 4.74 times

Using the information given below attempt Q 56, Q 57 and Q 58

Pioneer services Ltd extracted the following information from its SOFP as on 31 December 2012.

| 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 |  |
| Non-current liabilities | 240,000 |
| Secured loans |  |
| Current liabilities: | 150,000 |
| Trade payables | 290,000 |
| Bank overdraft | $\mathbf{8 0 0 , 0 0 0}$ |

Additional information: Sales and purchases for the year are \$500,000 and \$350,000 respectively. Assume 365 days in a year.
56. 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 |

57. 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 |

58. Based on the ratios calculated above, which of the following statement/s are true [2]
(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)
59. Nice-look Ltd manufactures and sells various cosmetic products in the Zimbabwean market. Nice-look's perfumes, namely Jasmine, Rose and Sandal, are famous amongst ladies of all the ages. The following information is related to the budgeted sales for quarter January March 2014.

| Product | Units | Contribution <br> per unit <br> $\mathbf{\$}$ | Total <br> contribution <br> $\$$ |
| :--- | ---: | ---: | ---: |
| Jasmine | 750 | 12 | 9,000 |
| Rose | 800 | 13 | 10,400 |
| Sandal | 675 | 11 | 7,425 |
| Total | $\mathbf{2 , 2 2 5}$ |  | $\mathbf{2 6 , 8 2 5}$ |

The following is the actual result obtained for each product in the quarter:

| Product | Units | Contribution <br> per unit <br> $\$$ | Total <br> contribution <br> $\$$ |
| :--- | ---: | ---: | ---: |
| Jasmine | 700 | 14.40 | $10,080.00$ |
| Rose | 900 | 12.50 | $11,250.00$ |
| Sandal | 650 | 11.25 | $7,312.50$ |
| Total | $\mathbf{2 , 2 5 0}$ |  | $\mathbf{2 8 , 6 4 2 . 5 0}$ |

The estimated total market for perfumes in a period of three months was 22,250 units. However, the actual total market for perfumes increased to 25,000 units for this quarter.

## Required:

(a) Calculate the total market size variance and market share variance.

The following additional details related to the production of Jasmine are available.

Actual material and labour hours used to produce 700 units of Jasmine are as follows:

|  | $\$$ |
| :--- | ---: |
| $32,550 \mathrm{ml}$ of material | 78,120 |
| 1,400 hours of direct labour | 14,700 |
| Selling price per unit | 147 |

Standard selling price and cost data for one unit of Jasmine is as follows:

| Direct material | 45 ml at $\$ 2.50$ per ml |
| :--- | :--- |
| Direct labour | 90 minutes at $\$ 14$ per hour |
| Selling price | $\$ 145.50$ |

(b) Calculate the following variances for the product Jasmine:
(i) Sales variances
(ii) Material variances
(iii) Labour variances
(c) Explain the three key purposes of a budgeting system.


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