## Pearson Edexcel International Advanced Level Accounting (Modular Syllabus) <br> Unit 2: Corporate and Management Accounting <br> Monday 16 January 2017 - Morning <br> Source Booklet for use with Questions 1 to 7

Do not return the insert with the question paper.


## SECTION A

## SOURCE MATERIAL FOR USE WITH QUESTION 1

1 Westdownes Farms Limited owns four dairy farms, producing milk that is sold to a major supermarket. The supermarket sets the price it is prepared to pay in an annual contract. The contract commences on 1 February 2016 and ends on 31 January 2017. The price payable is 28 pence ( $£ 0.28$ ) per litre of milk.

Information for the four farms for the year ended 31 January 2017:

| Farm | Berryfields | Highlands | Oaks | Woodgate |
| :--- | :---: | :---: | :---: | :---: |
| Number of cows | 155 | 120 | 148 | 132 |
|  | $\mathbf{£}$ | $\mathbf{£}$ | $\mathbf{£}$ | $\mathbf{£}$ |
| Direct materials | 176514 | 168192 | 194472 | 173448 |
| Direct labour | 108624 | 105120 | 116683 | 115632 |

## Additional information

- Each cow produces 8760 litres of milk per year.


## Required:

(a) Calculate the quantity of milk, in litres, produced by each of the four farms.

Fixed costs consist of the following:
(1) Farm managers' salaries:

| Farm | Berryfields | Highlands | Oaks | Woodgate |
| :--- | :---: | :---: | :---: | :---: |
| Manager's salary | $£ 12000$ | $£ 10000$ | $£ 11000$ | $£ 10000$ |

(2) Head office overheads - total $£ 28000$. To be apportioned in the following ratio:

| Farm | Berryfields | Highlands | Oaks | Woodgate |
| :--- | :---: | :---: | :---: | :---: |
| Ratio | 4 | 3 | 4 | 3 |

(3) Depreciation - at a rate of $2 \%$ on cost of farm buildings:

| Farm | Berryfields | Highlands | Oaks | Woodgate |
| :--- | :---: | :---: | :---: | :---: |
| Cost of farm buildings | $£ 900000$ | $£ 100000$ | $£ 250000$ | $£ 300000$ |

## Required:

(b) Calculate the total fixed costs for each of the four farms.
(c) Calculate the profit or loss for each of the four farms of Westdownes Farms Limited for the year ended 31 January 2017, rounding your answers to the nearest pound ( $£$ ) where necessary.

The supermarket has now informed Westdownes Farms Limited that it will only pay 25 pence ( $£ 0.25$ ) per litre in the next contract, starting on 1 February 2017 and ending on 31 January 2018.

All costs will remain the same for next year.

## Required:

(d) Calculate the forecast contribution made by each of the four farms, per litre of milk for, the year ended 31 January 2018.
(e) Evaluate the future of each of the four farms, using the figures calculated in (d) and any other relevant factors.

## SOURCE MATERIAL FOR USE WITH QUESTION 2

2 You are the new Finance Director at Bangla National Brick plc, and you have decided to introduce a standard costing system for production. You must explain how this is to be introduced at a board meeting.

## Required:

(a) Explain the stages in establishing a standard cost for a unit of production.

You decide to start by looking at the production of red bricks in the month of December 2016. First, you meet with the Production Manager, who provides some information that he uses as a basis for production for each month. You decide to use this information for the budget for December 2016.

## Budget for December 2016

- production of red bricks 135000 per month
- each red brick uses 2.8 kilos of clay
- cost of clay 2.6 pence ( $£ 0.026$ ) per kilo
- a team of 3 direct labour workers can produce 75 red bricks per hour
- there are 9 teams of 3 direct labour workers
- direct labour workers work for 10 hours a day, 5 days a week
- there are 4 weeks in a month
- direct labour workers are paid $£ 4.90$ per hour

On 2 January 2017 you meet with the Finance Manager, who provides you with the actual figures for December 2016.

## Actual for December 2016

- production of red bricks 135000
- cost of clay purchased for production $£ 9396$
- there is no opening or closing inventory of clay
- actual direct labour cost $£ 28350$

On 3 January 2017 you meet with the Purchasing Manager, who informs you that she purchased the clay used in December for 2.4 pence ( $£ 0.024$ ) per kilo.

On 4 January 2017 you meet with the Human Resources (HR) Manager, who informs you that he agreed to pay a labour rate of $£ 5.00$ per hour for December.

## Required:

(b) Calculate for December 2016 the:
(i) budgeted total quantity of clay to be used
(ii) budgeted total cost of clay to be used
(iii) actual total quantity of clay used
(iv) material price variance
(v) material usage variance
(vi) total material cost variance.
(c) Calculate for December 2016 the:
(i) budgeted total labour hours
(ii) budgeted total labour cost
(iii) actual hours worked
(iv) labour rate variance
(v) labour efficiency variance
(vi) total labour rate variance.

At the next board meeting, the Chair has asked you to inform the board of the performance of the four managers: Purchasing Manager, Human Resources (HR) Manager, Production Manager, and Finance Manager. The Chair requires your thoughts as to whether each manager should receive their bonus for December 2016. The bonus would be awarded if the performance of the individual manager in December was good.
(d) Evaluate the performance of each of the four individual managers for the month of December 2016. Your evaluation should include recommendations to the board concerning the awarding of the bonus for each manager for the month of December 2016.

## SOURCE MATERIAL FOR USE WITH QUESTION 3

3 Angel plc produces computer games, but has been making losses in a very competitive market. The directors have looked around to find a larger company to take over Angel plc.

United Games plc agreed to purchase the smaller company, Angel plc, on 2 January 2017. The directors of United Games plc agreed to take over all the assets and to settle all the liabilities.

The Statement of Financial Position of Angel plc at 31 December 2016 showed:

- all assets $£ 22600000$
- all liabilities $£ 14800000$
- ordinary shares and share premium - $£ 12500000$, consisting of $£ 0.60$ shares issued at a premium of $£ 0.20$ per share
- retained earnings $£ 4700000$ debit balance.

Angel plc and United Games plc agreed the following revaluations of some of the assets and liabilities:

- property was increased by 15 \% to a current market value of $£ 12650000$
- plant with a value of $£ 500000$ was written down to a value of $£ 380000$
- equipment with a book value of $£ 600000$ was written down by $£ 150000$
- a tax bill payable of $£ 320000$ was agreed at $£ 280000$


## Purchase price information

- For every one share held in Angel plc, each shareholder received:
- one $£ 0.25$ share in United Games plc, at a premium of $£ 0.27$
- and $£ 0.11$ cash.


## Required:

(a) Calculate the purchase price paid by United Games plc for Angel plc.
(b) Calculate the goodwill paid by United Games plc when Angel plc was purchased.
(c) Show the Journal entries to close the following accounts in the books of Angel plc, before any revaluations took place. Narratives are not required.

- Property
- Taxation payable
- Ordinary shares of $£ 0.60$
- Share premium
- Retained earnings
(d) Prepare the Sundry Shareholders Account in the books of Angel plc.
(e) Explain why holders of a $£ 0.60$ share in Angel plc accepted a $£ 0.25$ share in United Games plc and $£ 0.11$ pence per share.

Angel plc has made losses in the past few years. United Games plc paid goodwill to acquire Angel plc.
(f) Evaluate United Games plc paying goodwill to acquire Angel plc.

Answer space for Question 3 is on pages 16 to 20 of the question paper.

## SECTION B

## SOURCE MATERIAL FOR USE WITH QUESTION 4

4 You work for a firm of stockbrokers and have been asked to prepare a report on Muscat Technologies plc, who has just released its Annual Report and Financial Statements for the year ended 31 December 2016.

Extracts from the Financial Statements are shown below.

## Non-current liabilities

10 year 7\% Debenture $2020 £ 50000000$
8\% Bank loan
£30 000000
Statement of Changes in Equity

| Figures are in <br> $\mathbf{£ ~ m i l l i o n s ~}$ | Ordinary <br> $\mathbf{£ 1}$ share <br> capital <br> $\mathbf{£ m}$ | Share <br> premium <br> $\mathbf{£ m}$ | Retained <br> earnings <br> $\mathbf{£ m}$ | General <br> reserve <br> $\mathbf{£ m}$ | Foreign <br> exchange <br> reserve <br> $\mathbf{£ m}$ | Total <br> equity |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{£ m}$ |  |  |  |  |  |  |
| Balance at <br> 1 January 2016 | 80 | 12 | 11.8 | 4 | 9 | 116.8 |
| Comprehensive <br> income for the year |  |  | 12 |  |  | 128.8 |
| Transfer to general <br> reserve |  |  | $(4)$ | 4 |  | 128.8 |
| Interim dividend <br> paid June 2016 |  |  | $(0.8)$ |  |  | 128 |
| Final dividend paid <br> December 2016 |  | $(2)$ |  |  | 126 |  |
| Balance at <br> 31 December 2016 | 80 | 12 | 17 | 8 | 9 | 126 |

## Additional information

- Corporation tax paid on profits: $£ 3000000$
- Share price at 31 December 2016: $£ 1.40$


## Required:

(a) Calculate the following ratios, using the year end balances where relevant:
(i) dividend paid per share
(ii) dividend cover
(iii) dividend yield
(iv) earnings per ordinary share
(v) price/earnings ratio
(vi) return on capital employed.
(b) Calculate the gearing ratio, stating the formula used, using the year end balances where relevant.

The report you are preparing will be used to give investment advice to clients.
(c) Evaluate the performance of Muscat Technologies plc, and make a recommendation to clients advising whether to invest in the company or not.

Answer space for Question 4 is on pages 21 to 24 of the question paper.

## SOURCE MATERIAL FOR USE WITH QUESTION 5

5 Maria Andreou will commence business selling sandals. The sandals will be produced in a workshop at the back of her shop, by staff who will be paid for each pair of sandals produced. Maria will work in the shop, selling the sandals to customers.

She estimates the following figures for the first year of trading:

- material cost $£ 3.25$ per pair of sandals
- labour cost $£ 8.50$ per pair of sandals
- rent of shop premises $£ 310$ per month
- insurance and accountancy fees $£ 396$ per year
- other fixed costs $£ 5$ a week
- selling price per pair of sandals $£ 20$
- number of pairs of sandals to be produced and sold per year 960
- the business will be open for 48 weeks in the year
- assume 4 weeks in a month
- assume 12 months in a year.

You are Maria's accountant. Maria requires further information before starting the business.

## Required:

(a) Calculate the:
(i) number of pairs of sandals that need to be sold in the year to break-even
(ii) number of pairs of sandals that need to be sold per week to break-even
(iii) forecast profit for the year.

The first year of trading was good, and sales were higher than expected. For the second year of trading, Maria has decided to look for larger premises in a better location for sales.

The following information applies to the second year of trading:

- number of pairs of sandals to be produced and sold per year 1500
- labour cost per pair of sandals, $£ 8.75$
- selling price per pair of sandals, $£ 22$
- target annual profit $£ 8000$
- all other costs, except rent, to stay the same.
(b) Calculate the maximum amount of rent per month that Maria could pay if she is to reach her target annual profit figure of $£ 8000$.

Maria has informed you that for the second year of trading she is considering making the sandals herself, instead of paying labour to produce the sandals.
(c) Evaluate the proposal by Maria to produce the sandals herself.

Answer space for Question $\mathbf{5}$ is on pages $\mathbf{2 5}$ to $\mathbf{2 8}$ of the question paper.

## SOURCE MATERIAL FOR USE WITH QUESTION 6

6 You are the Financial Accountant for Panadura Spice Traders plc.
Extracts from the Statements of Financial Position for the last two years are shown below.

|  | $31 \text { December } 2015$ | 31 December 2016 £ |
| :---: | :---: | :---: |
| Non-current assets |  |  |
| Property, plant and equipment | 8542000 | 5869000 |
| Provision for depreciation | (3679 000) | (3137000) |
| Property, plant and equipment carrying value | 4863000 | 2732000 |
| Intangible assets | $\underline{200000}$ | $\underline{2600000}$ |
|  | 7663000 | 5332000 |
| Current assets |  |  |
| Inventories | 4387000 | 4653000 |
| Trade receivables | 321000 | 375000 |
| Other receivables | 23000 | 17000 |
| Cash and cash equivalents | 143000 | -------- |
|  | 4874000 | 5045000 |
|  |  |  |
| Total assets | 12537000 | 10377000 |
|  |  |  |
| Current liabilities |  |  |
| Bank overdraft | ------------- | 72000 |
| Trade payables | 2793000 | 3018000 |
| Other payables | 57000 | 51000 |
| Current tax payable | $\underline{315000}$ | $\underline{217000}$ |
|  | 3165000 | 3358000 |

## Additional information

(1) On 3 March 2016 property that cost $£ 2450000$ with depreciation to date of $£ 645000$ was sold for $£ 1925000$
(2) On 4 September 2016 plant that cost $£ 387000$ with a carrying value of $£ 193000$ was sold for $£ 167000$
(3) All plant, property and equipment are kept in the Plant, Property and Equipment Account at cost. All sales of non-current assets are recorded in a Disposals of Non-Current Assets Account.
(4) On 5 November 2016 equipment was bought for $£ 164000$
(5) No intangible assets were bought or sold in 2016.
(6) Interest on the bank overdraft was $£ 5000$ for the year.
(7) On 1 July 2011 a 10-year debenture for $£ 5000$ 000, at a fixed interest rate of $9 \%$, was issued.
(8) Profit after interest for the year ended 31 December 2016 was $£ 2038000$

## Required:

(a) Prepare, for the year ended 31 December 2016, the:
(i) Property, Plant and Equipment Account
(ii) Cash Flows from Operating Activities section of the Statement of Cash Flows, in accordance with International Accounting Standard (IAS) 7.

The Managing Director stated, 'We had to sell the property we owned, to improve cash flow.'
(b) Evaluate whether a company should sell non-current assets to improve cash flow.

## SOURCE MATERIAL FOR USE WITH QUESTION 7

7 ZimbaPower Electrical Limited buys and sells electrical goods. The company has many stores throughout the country, and is to open its first store in the city of Naniuke on 1 February 2017.

The following information is available concerning purchases for the Naniuke store:

- In the period February to July, monthly purchases are expected to be 1200 units each month.
- The average cost of a purchase is $£ 60$ per unit.
- The credit terms given by suppliers are:
- $10 \%$ sell only for cash
- $60 \%$ give one month's credit
- $25 \%$ give two months' credit
- $5 \%$ give three months' credit.
- Full advantage is taken of credit terms offered by suppliers.

You are the Cost Accountant for ZimbaPower Electrical Ltd, and have to prepare the budgets in columnar format.

## Required:

(a) Prepare for each of the months from February to July for the Naniuke store the:
(i) purchases budget, in pounds (£)
(ii) trade payables budget, showing the amount owed to suppliers at the end of each month.

The following information is available for forecasted sales at the Naniuke store:

- The mark up on all units will be $100 \%$.
- All units are to be sold in the same month as purchase.
- Sales are made on the following terms:
- $80 \%$ are for cash
- $20 \%$ will spread payments equally over a 6-month period, with the first payment due one month after the sale.


## Required:

(b) Prepare for each of the months from February to July the:
(i) sales budget, in pounds ( $£$ )
(ii) trade receivables budget, showing the amount owed by customers at the end of each month.

The company is considering adding interest on to sales on credit.
(c) State:
(i) two advantages of adding interest on to sales on credit
(ii) two disadvantages of adding interest on to sales on credit.

ZimbaPower Electrical Limited has estimated the figures that will be entered into the budgets for the store at Naniuke.
(d) Evaluate the possible accuracy of the estimates ZimbaPower Electrical Limited has entered into the budgets for February to July.

Answer space for Question 7 is on pages 32 to 36 of the question paper.

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