## Pearson Edexcel International Advanced Level

# Accounting (Modular Syllabus) 

Unit 2: Corporate and Management Accounting

Tuesday 25 October 2016 - Morning
Source Booklet for use with Questions 1 to 7

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## SECTION A

## SOURCE MATERIAL FOR USE WITH QUESTION 1

1 Compass Tablets plc produces tablet computers at its factory. These are then delivered to the company's warehouse, before sale to trade customers.

The following balances were in the books at 30 September 2016:

|  | Debit <br> $\mathbf{£}$ | Credit <br> $\mathbf{£}$ |
| :--- | ---: | ---: |
| Advertising and marketing costs | 734000 |  |
| Bad debts | 323000 |  |
| Bank | 656000 |  |
| Bank interest | 342000 |  |
| Cash | 680000 |  |
| Corporation tax | 7943500 |  |
| $6.5 \%$ Debenture 2020 | 1064000 |  |
| Direct materials |  | 10000000 |
| Discount allowed | 21000000 |  |
| Discount received |  | 619000 |
| Factory buildings (cost) | 848000 |  |
| Factory buildings depreciation | 3211000 |  |
| Fuel and power | 325000 |  |
| Head office expenses | 7500000 |  |
| Interest on debenture | 1800000 |  |
| Inventory at 1 October 2015 |  | 988000 |
| Motor vehicles (cost) |  |  |
| Motor vehicles depreciation |  |  |
| Ordinary shares of $£ 0.25$ |  | 49000000 |
| Other payables |  |  |
| Patents |  |  |
| Production machinery (cost) |  |  |
| Production machinery depreciation |  |  |
|  |  |  |
|  |  |  |


| Retained earnings | 2354700 |  |
| :--- | ---: | ---: |
| Revenue |  | 29870000 |
| Sales commission | 2130000 |  |
| Trade payables |  | 1288000 |
| Trade receivables | 5510000 |  |
| Wages | 7750000 |  |
| Warehouse premises (cost) | $\underline{\underline{65619} 200}$ | $\underline{\underline{65619200}}$ |
| Warehouse premises depreciation | $\underline{\underline{2131000}}$ |  |
|  |  |  |

## Additional information at 30 September 2016

- The debenture interest is paid every 6 months, in March and September.

The interest due to be paid in September is outstanding.

- Inventory $£ 1424000$
- Advertising and marketing costs owing $£ 124000$
- Head office expenses include $£ 18900$ paid in advance.
- Wages consist of:

|  | $\mathbf{£}$ |
| :--- | :---: |
| Production staff | 2970000 |
| Head office staff | 1514000 |
| Motor vehicle drivers | 1026000 |

- Assuming a nil residual value and using the straight line method, the
- factory buildings are to be depreciated over a 50-year life
- motor vehicles are to be depreciated over a 5-year life
- production machinery is to be depreciated over a 10-year life
- warehouse is to be depreciated over a 40-year life.
- Fuel and power consists of:

|  | $\mathbf{£}$ |
| :--- | ---: |
| Motor vehicles | 525000 |
| Factory | 226000 |
| Head office | 97000 |

- Corporation Tax payment has been made for $£ 680$ 000. The Corporation Tax total for the year will be $£ 1350000$. A provision is to be made for the difference.


## Required:

(a) Prepare for Compass Tablets plc, in accordance with International Accounting Standard 1 (IAS1) (Revised), a:
(i) Statement of Comprehensive Income for the year ended 30 September 2016
(ii) Statement of Financial Position at 30 September 2016.
(b) Evaluate the performance of Compass Tablets plc for the year ended 30 September 2016 and the financial position at 30 September 2016.

Answer space for Question 1 is on pages $\mathbf{2}$ to $\mathbf{8}$ of the question paper.

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QUESTION 2 BEGINS ON THE NEXT PAGE.

## SOURCE MATERIAL FOR USE WITH QUESTION 2

2 Qaid Nasir has a 5-year agreement to rent retail premises and intends to open a souvenir shop. The initial project costs involved in obtaining the agreement and preparing the shop for opening are $£ 20000$.

## Additional information

- The shop will open for 50 weeks in a year.
- In the first week of the first year, 5000 products will be purchased, at an average cost of $£ 2.70$ each.
- The mark up on all goods sold for every year will be $100 \%$.
- In Year 1, sales will be 130 products per week, at an average price of $£ 5.40$ each.
- In the remaining 49 weeks of Year 1, goods purchased each week will replace goods sold each week, at an average price of $£ 2.70$ each.
- In Years 2 and 3, sales will be 150 products per week, bought at an average cost of £2.80 each.
- In Years 4 and 5, sales will be 160 products per week, bought at an average cost of $£ 2.90$ each.
- In Years 2, 3, 4 and 5, purchases will replace goods sold for the 50 weeks in the year.
- In Years 1 and 2, the expected running costs (including depreciation) will be £280 per week.
- In Years 3 and 4, the expected running costs (including depreciation) will be £300 per week.
- In Year 5, the expected running costs (including depreciation) will be $£ 320$ per week.
- Depreciation will be $£ 4000$ per year for each of the 5 years of the agreement.


## Required:

(a) Calculate the net cash flow for each of the five years of the agreement.
(b) Calculate the Payback period for the project.

Qaid Nasir is also appraising the project using the Internal Rate of Return method.
He has decided to use $17 \%$ as the lower rate and $20 \%$ as the higher rate.
Tables for $17 \%$ and $20 \%$ discount factors are as follows:

| Year | $\mathbf{1 7 \%}$ | $\mathbf{2 0 \%}$ |
| :---: | :---: | :---: |
| 1 | 0.855 | 0.833 |
| 2 | 0.731 | 0.694 |
| 3 | 0.624 | 0.579 |
| 4 | 0.534 | 0.482 |
| 5 | 0.456 | 0.402 |

## Required:

(c) Calculate the net present value of the net cash flows found in (a), to two decimal places, using a
(i) $17 \%$ discount factor
(ii) $20 \%$ discount factor.
(d) Calculate, clearly stating the formula used, the Internal Rate of Return correct to one decimal place.
(e) Evaluate Payback and the Internal Rate of Return as methods of appraising an investment.

Answer space for Question $\mathbf{2}$ is on pages 9 to 15 of the question paper.

## SOURCE MATERIAL FOR USE WITH QUESTION 3

3 The Statement of Changes in Equity of Chandani Banking plc for the year ended 30 September 2016 is being prepared and is shown below.

| Figures are in £ millions | £1 Ordinary Shares £m | Share Premium £m | Retained Earnings £m | General Reserve <br> £m | Capital Replacement Reserve £m | Revaluation Reserve £m | Total Equity <br> £m |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (i) Balance at 1 October 2015 |  |  |  |  |  |  |  |
| (ii) |  |  |  |  |  |  |  |
| (iii) |  |  |  |  |  |  |  |
| (iv) |  |  |  |  |  |  |  |
| (v) |  |  |  |  |  |  |  |
| (vi) |  |  |  |  |  |  |  |
| (vii) |  |  |  |  |  |  |  |
| (viii) |  |  |  |  |  |  |  |
| (ix) Balance at 30 September 2016 |  |  |  |  |  |  |  |

The Statement of Changes in Equity on Page 16 of the Question Paper must record the figures in the table for items (i) to (ix).
(i) Balances at 1 October 2015:
£1 Ordinary Shares - $£ 400$ million
Share Premium - £100 million
Retained Earnings - $£ 4$ million debit balance
General Reserve - $£ 2$ million
Capital Replacement Reserve - $£ 1$ million
Revaluation Reserve - $£ 27$ million
Enter the opening balances for the year ended 30 September 2016 and the Total Equity figure.
(ii) On 1 December 2015 a fully subscribed rights issue of 100 million $£ 1$ ordinary shares took place, at a premium of 5 pence per share.
(iii) On 10 December 2015 property that had been revalued from $£ 60$ million to $£ 80$ million, was sold for $£ 80$ million and the appropriate amount transferred to Retained Earnings. (It is usual for this to be shown as a separate item in the Statement of Changes in Equity.)
(iv) On 20 December 2015 an interim dividend for 2016 of 0.5 pence ( $£ 0.005$ ) was paid to shareholders. Only the shareholders who held shares before 1 December 2015 were eligible for the dividend.
(v) On 31 January 2016 the balance on the General Reserve was transferred back to Retained Earnings.
(vi) On 10 February 2016 a transfer of $£ 8$ million was made from Retained Earnings to the Capital Replacement Reserve.
(vii) On 11 March 2016 a second interim dividend was paid for 2016. The dividend was 0.8 pence $(£ 0.008)$ per share and all shareholders were eligible for the dividend.
(viii)The profit for the year ended 30 September 2016 was $£ 7$ million.
(ix) Show the balances at 30 September 2016 and the Total Equity at that date.

## Required:

(a) Complete the Statement of Changes in Equity on Page 16 in your Question Paper.
(b) Explain which accounting concept applied in (a) (iii).
(c) State two examples of how the Capital Replacement Reserve could be used.
(d) Explain why there was no final dividend on Ordinary shares paid for 2015.
(e) Calculate the maximum that could be paid per Ordinary share as a final dividend for 2016.
(f) Calculate the percentage premium paid per share on the:
(i) shares issued before 1 October 2015
(ii) shares issued on 1 December 2015.
(g) Explain why there may be a difference in the percentage premium between the two share issues.

The Marketing Manager commented, 'I noticed that a rights issue of shares took place during the year. Was this really a good idea?'

## Required:

(h) Evaluate the rights issue from the point of view of Chandani Banking plc.

Answer space for Question 3 is on pages 16 to 21 of the question paper.

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QUESTION 4 BEGINS ON THE NEXT PAGE.

## SECTION B

## SOURCE MATERIAL FOR USE WITH QUESTION 4

4 Pranja Rahman is a businessperson who invests in projects she thinks will be profitable. She now has the opportunity to produce and distribute in her country, under licence, the international best-selling board game 'Whodunit?' Pranja uses break-even analysis to help her decide whether to invest.

The following information is available for Year 1 of the project:

- Ioan interest and repayment will be $£ 365$ per month
- rent of workshop unit will be $£ 925$ per month
- material costs per board game are 54 pence ( $£ 0.54$ )
- depreciation on the business assets will be $£ 3900$ per year
- direct labour in production will be paid $£ 3.50$ per board game
- electricity bill is $£ 455$ a quarter (three-month period) plus 3 pence $(£ 0.03)$ per board game
- insurance for the year is $£ 2000$
- the manager will be paid a salary of $£ 1100$ per month
- selling price of one board game is $£ 8.99$
- sales of board games are expected to be 200 board games per week
- delivery costs will be 25 pence ( $£ 0.25$ ) for each board game sold
- the terms of the licence state that a 12 pence ( $£ 0.12$ ) licence fee for each board game produced is payable
- all production is sold
- there are 52 weeks in one year
- Pranja requires a project to break-even in 40 weeks or less.


## Required:

(a) Calculate for Year 1 the:
(i) number of board games to be sold to break-even
(ii) expected profit or loss of the project.
(b) (i) Calculate the number of weeks that the project will take to break-even.
(ii) Advise Pranja whether she should undertake the project.
(c) Calculate the margin of safety for the project in:
(i) units
(ii) sales revenue
(iii) weeks.
(d) Evaluate Pranja's use of break-even analysis and a 40-week break-even period, when deciding whether to invest in a project.

Answer space for Question 4 is on pages 22 to 26 of the question paper.

## SOURCE MATERIAL FOR USE WITH QUESTION 5

5 The Statement of Cash Flows for Indian Ocean Containers plc has been drawn up in accordance with International Accounting Standard 7 (IAS7) and is shown below.

| Statement of Cash Flows for Indian Ocean Containers plc for year ended 30 September 2016 |  |  |
| :---: | :---: | :---: |
| Cash Flows from Operating Activities | $\begin{gathered} \mathbf{£} \\ 000 \text { 's } \end{gathered}$ | $\begin{gathered} £ \\ 000 \text { 's } \end{gathered}$ |
| Profit from operations | 45 |  |
| Add depreciation on non-current assets | 52 |  |
| Add loss on sale of non-current asset | 13 |  |
| Operating cash flow before working capital changes | 110 |  |
| Increase in inventories | (27) |  |
| Decrease in trade receivables | 31 |  |
| Increase in trade payables | 35 |  |
| Cash generated from operations | 149 |  |
| Less interest paid: Bank overdraft | (9) |  |
| Bank loan | (40) |  |
| Less tax paid | (22) |  |
| Net cash from operating activities |  | 78 |
| Cash Flows from Investing Activities |  |  |
| Payments to acquire tangible non-current assets | (110) |  |
| Proceeds from sale of tangible non-current assets | 23 |  |
| Proceeds from sale of shares in other companies | 70 |  |
| Dividends received from shares in other companies | 4 |  |
| Net cash used in investing activities |  | (13) |


| Cash Flows from Financing Activities |  |  |
| :--- | ---: | ---: |
| Issue of Ordinary Shares | 45 |  |
| Dividends paid: Final 2015 | (24) |  |
| Preference 2016 | $(7)$ |  |
| Net cash from financing activities | $(12)$ |  |
|  |  | $\mathbf{2}$ |
| Net increase in cash and cash equivalents |  |  |
|  |  | $\mathbf{6 7}$ |
| Cash and cash equivalents at the beginning of the year |  | (106) |
|  |  |  |
| Cash and cash equivalents at the end of the year |  | (39) |

## Required:

(a) Prepare answers to the following:
(i) Calculate the profit or loss, after interest payments, for the year ended 30 September 2016.
(ii) Equipment was the only non-current asset sold in the year, for $£ 23000$. State the net book value of the equipment when sold.

Inventories increased during the year.
(iii) Explain one advantage and one disadvantage of an increase in inventories.
(iv) Customers owed $£ 65000$ at the end of the year. Calculate the amount customers owed at the start of the year.
(v) Suppliers were owed $£ 58000$ at the start of the year. Calculate the amount suppliers were owed at the end of the year.
(vi) The 8\% Bank loan was issued on 1 October 2014. Calculate the amount of the loan.
(vii) State three reasons why Indian Ocean Containers plc would sell the shares it holds in other companies.
(viii) At 1 October 2015, Indian Ocean Containers plc had an overdraft of $£ 135000$.

Calculate the cash balance of the company at this date.
(ix) At 30 September 2016, Indian Ocean Containers plc had $£ 9000$ cash. Calculate the exact movement on the bank balance during the year.

There are three sections on a Statement of Cash Flows: Operating Activities, Investing Activities and Financing Activities.
(b) Evaluate in which of the three sections it would be most important to have a positive cash flow, for any company.

Answer space for Question 5 is on pages 27 to 31 of the question paper.

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QUESTION 6 BEGINS ON THE NEXT PAGE.

## SOURCE MATERIAL FOR USE WITH QUESTION 6

6 Andromeda plc manufactures a fragrance, 'Anastazia'. Sales are seasonal, building up to a peak in December. After December, monthly sales of 'Anastazia' decline.

The following information is available:

- expected sales of bottles of 60 millilitres

| November | December | January | February | March |
| :---: | :---: | :---: | :---: | :---: |
| 22000 | 38000 | 12000 | 16000 | 20000 |

- production takes place one month before sales
- raw materials are bought at the start of the month, in quantities to meet the month's production
- $2 \%$ of raw material is wasted during the production process
- $5 \%$ of the finished products are rejected after inspection at the end of the production process
- water is free, and is taken from a stream on the site
- each bottle contains 10 millilitres of raw material, to which water is added, to produce the finished product
- raw material costs $£ 55$ per litre
- there are 1000 millilitres in 1 litre
- inventory at the end of the month is always planned to be $20 \%$ of the following month's sales
- each bottle sells for $£ 4.50$
- trade receivables:
$10 \%$ of customers pay cash when the sale is made $30 \%$ of customers pay by cheque in the month of the sale $60 \%$ of customers pay by cheque in the month following the sale.


## Required:

(a) Prepare for Andromeda plc, the following budgets for 'Anastazia' for the three months from December to February. You should prepare the budgets in columnar format. Show each of the three months in a separate column. You should round up to the nearest whole number where appropriate.
(i) Inventory budget (in bottles)
(ii) Production budget (in bottles)
(iii) Raw material purchases budget in millilitres
(iv) Raw material purchases budget in pounds (£)
(v) Trade receivables budget, showing the amount owed at the end of the month

The Managing Director has stated, 'I am worried that too many finished goods of 'Anastazia' are being rejected.'

## Required:

(b) Evaluate the Managing Director's statement.

Answer space for Question 6 is on pages 32 to 34 of the question paper.

## SOURCE MATERIAL FOR USE WITH QUESTION 7

7 Acorn Supplies Limited has a small factory, where it produces four steel products for the construction industry: beams, fence posts, brackets, and lintels. Production is planned according to demand, and the company has seen demand increase. When production is planned for Week 43, Acorn Supplies Limited is not sure it is able to meet all the orders. This is because it does not have the capacity to heat and melt enough steel.

There is one furnace which can be used to heat and melt the steel, to produce any of the four products. The furnace can operate for 12 hours a day. The furnace holds 50 kilograms of metal, which takes 45 minutes to melt, to use for production. The company is only able to operate the furnace for 12 hours a day, for 6 days a week.

## Required:

(a) Calculate the amount of steel that can be used for production in one week.

The following information is available for Week 43:

| Product | Beams | Fence posts | Brackets | Lintels |
| :--- | :---: | :---: | :---: | :---: |
| Materials (steel) per unit (kgs) | 12 | 10 | 6 | 8 |
| Variable costs per unit | $£ 18$ | $£ 10$ | $£ 9$ | $£ 7$ |
| Selling price per unit | $£ 45$ | $£ 28$ | $£ 21$ | $£ 15$ |
| Sales units | 265 | 135 | 120 | 95 |

(b) Calculate the optimum production mix that Acorn Supplies Ltd should produce to give the maximum profit.
(c) Calculate the forecast profit for Week 43 for the optimum production mix if fixed costs for Week 43 are $£ 6845$

Sometimes, when demand for its products is high, Acorn Supplies Ltd may decide not to produce all of its product range for a few weeks.
(d) Evaluate the decision of Acorn Supplies Limited not to produce all of its product range for a few weeks.


[^0]:    Do not return the insert with the question paper.

