# International Advanced Level Accounting (Modular Syllabus) 

Unit 2 - Corporate and Management Accounting
Wednesday 11 June 2014 - Morning

## Source booklet for use with <br> Questions 1 to 7.

## Do not return the insert with the question paper.

## SECTION A

## SOURCE MATERIAL FOR USE WITH QUESTION 1

1. Wavelength Asia plc produces satellite dishes at its factory. The satellite dishes are then delivered to the company's warehouse before sale to customers.

At 31 March 2014, the following balances were in the books.

|  | $\begin{gathered} \text { Debit } \\ £ \end{gathered}$ | $\begin{gathered} \text { Credit } \\ £ \end{gathered}$ |
| :---: | :---: | :---: |
| Bad debts | 77000 |  |
| Bank | 125000 |  |
| Bank loan interest | 20000 |  |
| Cash | 27000 |  |
| 7.5\% Debenture 2016 |  | 2000000 |
| Direct materials | 4121000 |  |
| Factory buildings at cost | 2800000 |  |
| Factory buildings depreciation |  | 112000 |
| Goodwill | 800000 |  |
| Interest on debenture | 150000 |  |
| Inventory at 1 April 2013 | 326000 |  |
| Land at cost | 3100000 |  |
| Marketing costs | 759000 |  |
| Motor vans at cost | 124000 |  |
| Motor vans depreciation |  | 48000 |
| Office expenses | 184000 |  |
| Ordinary shares $£ 1$ |  | 2258000 |
| Rent on warehouse premises | 209000 |  |
| Retained earnings |  | 1121000 |
| Revenue |  | 8653000 |
| Shipping costs | 521000 |  |
| Short-term bank loan |  | 500000 |
| Trade payables |  | 645000 |
| Trade receivables | 556000 |  |
| Wages | 1438000 |  |
|  | $\underline{15337000}$ | $\underline{15337000}$ |

## Additional information at 31 March 2014:

- Inventory $£ 389000$
- Interest owing on bank loan $£ 4000$
- Marketing costs include $£ 250000$ paid in advance
- Wages include

|  | $£$ |
| :--- | :---: |
| Direct factory labour | 988000 |
| Office staff | 294000 |
| Motor van drivers | 156000 |

- Assuming a nil residual value and using the straight line method
- the factory buildings are to be depreciated over a 50 year life
- the motor vans are to be depreciated over a four year life
- A Corporation tax provision to be made for $£ 399000$, payable by 30 April 2014


## Required:

(a) Showing all workings clearly, prepare for Wavelength Asia plc, in accordance with International Accounting Standard 1 (Revised), the:
(i) Statement of Comprehensive Income for the year ended 31 March 2014
(ii) Statement of Financial Position at 31 March 2014.
(b) Evaluate the financial performance of Wavelength Asia plc for the year ended 31 March 2014 and the financial position at 31 March 2014.

Answer space for question 1 is on pages 2 to 9 of the question paper.

## SOURCE MATERIAL FOR USE WITH QUESTION 2

2. Grecian Glass Limited has a factory, producing four glass products: vases, bowls, dishes and ornaments. Production is planned according to demand, and Grecian Glass Limited has seen demand increase. When production is planned for Week 16, Grecian Glass Limited does not have enough resources to meet all the orders in Week 16. Grecian Glass Limited is only able to operate the factory for 55 hours a week.

There are 11 skilled direct labour staff, each of whom could produce any of the four products and could each work a 55 hour week.

There are 14 machines each of which can produce any of the four products, each of which operate for 55 hours a week.

The same glass material is used for all four products. Glass materials for production are delivered in 10 kilogram blocks and placed on shelves in the stores. Three rows of five blocks are required to fill a shelf. At the start of Week 16, there are three shelves filled to capacity.

The following information is available for Week 16:

| Product | Vases | Bowls | Dishes | Ornaments |
| :--- | :---: | :---: | :---: | :---: |
| Labour hours per unit | 1.5 | 2 | 1 | 3 |
| Machine hours per unit | 1 | 2.5 | 1.5 | 3.5 |
| Materials per unit (kilograms) | 1.2 | 1.8 | 1.6 | 0.5 |
| Variable costs per unit | $£ 23$ | $£ 35$ | $£ 25$ | $£ 30$ |
| Selling price per unit | $£ 32$ | $£ 45$ | $£ 37$ | $£ 41$ |
| Sales units | 120 | 70 | 60 | 90 |

## Required:

(a) If Grecian Glass Limited were to meet all the demand for Week 16, calculate the amount of input required for each product and in total for each of the following factors of production:
(i) Labour hours
(ii) Machine hours
(iii) Materials (kilograms)
(b) Calculate the total amount available for production in Week 16, for each of the following factors of production:
(i) Labour hours
(ii) Machine hours
(iii) Materials (kilograms)
(c) For each of the three factors of production (labour hours, machine hours and material in kilograms) calculate the shortage or excess for Week 16. State whether each factor of production is a limiting factor, or not a limiting factor, for Week 16.
(d) Calculate the optimum units of production in Week 16 of vases, bowls, dishes, and ornaments, to give the maximum contribution.
(e) Calculate the forecast profit for Week 16 at the optimum production level if fixed costs for Week 16 are $£ 1950$.

At the start of Week 16 another business, Hellenic Design Limited, asks Grecian Glass Limited if it is interested in a regular contract.

Hellenic Design Limited will supply 50 ornaments a week to Grecian Glass Limited, at a price of $£ 35$ per item, for one year.
(f) Evaluate whether the directors of Grecian Glass Limited should accept the offer from Hellenic Glass Limited.

Answer space for question 2 is on pages 10 to 16 of the question paper.

## SOURCE MATERIAL FOR USE WITH QUESTION 3

3. The Statement of Changes in Equity of Barisal Industrials plc for the year ended 31 March 2014 is being prepared and is shown below.

Figures are in $£$ millions

|  | Ordinary <br> Shares £1 <br> Capital <br> $£$ | Share <br> Premium <br> $£$ | Capital <br> Redemption <br> Reserve <br> $£$ | Retained <br> Earnings <br> $£$ | General <br> Reserve <br> $£$ | Foreign <br> Exchange <br> Reserve <br> $£$ | Total Equity <br> $£$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at <br> 1 April 2013 | 1100 | 300 | 50 | 623 | 85 | 20 | 2178 |
| (i) |  |  |  |  |  |  |  |
| (ii) |  |  |  |  |  |  |  |
| (iii) |  |  |  |  |  |  |  |
| (iv) |  |  |  |  |  |  |  |
| (v) |  |  |  |  |  |  |  |
| (vi) |  |  |  |  |  |  |  |
| (alance at |  |  |  |  |  |  |  |
| 31 March <br> (in |  |  |  |  |  |  |  |

You are the Finance Director for Barisal Industrials plc.

## Required:

(a) Complete the Statement of Changes in Equity in the Answer Booklet to show the figures for the following changes for the year ended 31 March 2014. You should show your workings in the lined space available.
(i) Comprehensive Income for the year ended 31 March 2014 was $£ 348$ million.
(ii) A sum of $£ 35$ million was transferred to the General Reserve from Retained Earnings.
(iii) The balance on the Foreign Exchange Reserve was transferred back to Retained Earnings.
(iv) In May 2013, the final dividend of 2.8 pence per Ordinary Share for the year ended 31 March 2013 was paid.
(v) In July 201380 million Ordinary Shares of $£ 1$ each, issued at a premium of 30 pence per share, were redeemed at the same price at which they were issued.
(vi) In October 2013, an interim dividend of 0.7 pence per Ordinary Share was paid.

Barisal Industrials plc redeemed some shares during the year.
(b) Explain:
(i) two advantages to a company of redeeming Ordinary Shares.
(ii) two disadvantages to a company of redeeming Ordinary Shares.

Over lunch, a new member of the Finance Department asks "What are the differences between reserves, provisions, and liabilities?"

## Required:

(c) Explain the following terms, including how each is created:
(i) reserves
(ii) provisions
(iii) liabilities

At a board meeting, the Human Resources Director asked "Do you think the payment of the total dividend of 3.5 pence per share in the last financial year was generous?"

## Required:

(d) On behalf of the company, evaluate whether the total dividend of 3.5 pence per share paid in the last financial year was generous.

## SECTION B

## SOURCE MATERIAL FOR USE WITH QUESTION 4

4. You are the Management Accountant for The Alexandria Sweet Company Limited, and are responsible for producing budgets and the variance analysis.

The following information applied to the Budget for the month of April 2014.

- Production and sales of sweet packets were expected to be 220000 packets
- Selling price per packet is $£ 0.35$ ( 35 pence)
- Direct labour costs are 19 workers paid $£ 8.50$ per hour
- Variable overheads are budgeted at $£ 10460$ for the month
- After deduction of material cost, labour cost, and variable overheads, a gross profit margin of $30 \%$ is expected
- After deduction of fixed overheads, a net profit margin of $8 \%$ is expected
- The factory operates for 40 hours a week, for 4 weeks per month


## Required:

(a) Complete the Budget Statement of Comprehensive Income in column (a) of the table in the answer booklet for the month of April 2014.

The following actual information was available for April 2014.

- Production and sales quantities were 220000 , as budgeted
- A special promotion was in operation for one week and 55000 packets were sold for £0.30 (30 pence) each
- All costs were as budgeted, except for the following:
- A fall in the world price of sugar resulted in material costs falling by $12 \%$
- Trade unions obtained a pay rise to $£ 8.75$ per hour, for the last two weeks of April
- Variable overheads included electricity, budgeted at $£ 0.18$ ( 18 pence) per unit of electricity. The actual price of electricity rose by $£ 0.02$ ( 2 pence) per unit of electricity. The amount of electricity used was the same as the budgeted figure, at 14500 units of electricity
- Fixed overheads included the salary of an Assistant Manager, who worked for one week in April and was paid for one week. She then left and was not replaced. The Assistant Manager was paid $£ 24000$ per year


## Required:

(b) Prepare the Actual Statement of Comprehensive Income in column (b) of the table in the answer booklet for the month of April 2014.
(c) Complete a Variance column in column (c) of the table in the answer booklet for the month of April 2014.

A member of staff states "I do not know why we bother drawing up budgets, because most of the figures in the Statement of Comprehensive Income are out of our business's control."
(d) Evaluate budgets as a management tool for control.

Answer space for question 4 is on pages 26 to 28 of the question paper.

## SOURCE MATERIAL FOR USE WITH QUESTION 5

5. The Statement of Cash Flows for Chang Tao Stores plc has been drawn up according to International Accounting Standard 7 (IAS7) and is shown below.

| Statement of Cash Flow for Chang Tao Stores plc <br> for year ended 31 March 2014 |  |  |
| :--- | ---: | :---: |
|  | $£$ | $£$ <br> 000 's |
|  |  |  |
| Cash Flows from operating activities | 15987 |  |
| Profit from operations | 459 |  |
| Add depreciation on non-current assets | $(35)$ |  |
| Less profit on sale of non-current asset | 16411 |  |
| Operating cash flow before working capital changes | $(313)$ |  |
| Increase in inventories | 348 |  |
| Decrease in trade receivables | $(274)$ |  |
| Decrease in trade payables | 16172 |  |
| Cash generated from operations | $(76)$ |  |
| Less interest paid: Bank overdraft | $(480)$ |  |
|  | $(3409)$ |  |
| Less tax paid |  | 12207 |
| Net Cash from Operating Activities |  |  |
|  | $(13248)$ |  |
| Cash Flows from Investing Activities | $570)$ |  |
| Payments to acquire tangible non-current assets | 126 |  |
| Payments to acquire shares in other companies | $(33692)$ |  |
| Dividends received from shares in other companies |  |  |
| Net Cash Used in Investing Activities |  |  |


| Cash Flows from Financing Activities |  |  |
| :--- | ---: | ---: |
| Issue of Ordinary Shares | 9000 |  |
| Issue of Debenture | 12000 |  |
| Dividends paid: Final 2013 | $(286)$ |  |
| Preferim 2014 | $(140)$ |  |
|  | $(100)$ |  |
| Net Cash from Financing Activities |  | 20474 |
|  |  |  |
| Net decrease in cash and cash equivalents |  | $(1011)$ |
|  |  | 2106 |
| Cash and cash equivalents at the beginning of the year |  |  |
|  |  | 1095 |
| Cash and cash equivalents at the end of the year |  |  |
|  |  |  |
| Net decrease in cash and cash equivalents |  |  |

## Required:

(a) Prepare answers to the following:
(i) Explain why an adjustment for depreciation charged is added in a Cash Flow statement.
(ii) Plant was the only non-current asset sold in the year, for $£ 120000$. State the book value of the plant when sold.
(iii) At the start of the year on 1 April 2013, unsold goods were valued at $£ 983$ 000. State the value of unsold goods at the end of the year.
(iv) Explain why the figure given for 'Decrease in Trade Receivables' is plus 348 and not minus 348.
(v) Suppliers were owed $£ 1084000$ at the end of the year. Calculate the amount owed to suppliers at the start of the year.
(vi) The debenture was issued on 1 August 2013. Interest is paid every six months, in January and July. Calculate the interest rate on the debenture.
(vii) The debenture is "secured on property" purchased on 1 August 2013. Explain what this means for Chang Tao Stores plc.
(viii) Explain why the Final Dividend for the year ended 31 March 2014 is NOT included in the Cash Flow statement for the year ended 31 March 2014.
(ix) At 1 April 2013, Chang Tao Stores plc had a bank balance of £209 000. Calculate how much cash Chang Tao Stores plc had at 1 April 2013.
(x) At 1 April 2014, Chang Tao Stores plc had an overdraft of $£ 178000$. Calculate the exact movement on the cash balances during the year.
(b) Evaluate the performance of Chang Tao Stores plc concerning liquidity, over the financial year ended 31 March 2014.

Answer space for question 5 is on pages 29 to 32 of the question paper.

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## SOURCE MATERIAL FOR USE WITH QUESTION 6

6. You are the accountant for Wilson Onyango Tailoring, which rents four shops, selling made-tomeasure suits. The made-to-measure suits are a luxury item, and trade may fluctuate according to the state of the economy. The last year has seen difficult trading conditions, and next year is expected to be the same. As a result, the owner of the business, Wilson Onyango, has asked you to carry out a financial review for the year ended 31 March 2014.

For the year ended 31 March 2014, the four shops have identical costs, which are:

- Material costs per suit $£ 78$
- Direct labour costs per suit $£ 95$
- Rent for each shop £3 375 per quarter (three months)
- Other fixed costs $£ 1115$ per month per shop
- Insurance for the whole business $£ 184$ per month

Other information available for the year ended 31 March 2014:

- Suits are only made to order. All suits made are sold, and no inventories of suits are held
- Each suit sells for $£ 250$
- Total number of suits for all four stores sold in year is 1400


## Required:

(a) As part of the financial review, prepare:
(i) the Statement of Comprehensive Income for the whole business for the year ended 31 March 2014.
(ii) calculations to find the break-even point, in sales units, for the year ended 31 March 2014.

Wilson Onyango decided to close one of the shops on 1 April 2014. The effects of this were:

- Rent and other fixed costs for the store closed would no longer apply
- No extra fixed costs would be allocated to the remaining three stores
- Insurance for the whole business would be $£ 170$ per month
- Sales in all three stores would fall to 1350 per year in total
- All other costs and revenues remain the same


## Required:

(b) As a further part of the financial review, prepare:
(i) the forecast Statement of Comprehensive Income for the year ended 31 March 2015
(ii) calculations to find the forecast break-even point, in sales units, for the year ended 31 March 2015
(iii) calculations to find the forecast margin of safety, measured in sales units, for the year ended 31 March 2015

Wilson Onyango likes to see the figures presented graphically.

## Required:

(c) On the grid in your answer booklet, mark on the following for the year ended 31 March 2015:

- Fixed costs
- Total costs
- Sales revenue
- Break-even point
- Margin of safety, measured in sales units, if sales are 1350 units
- Indicate the area of profit if sales are 1350 units
(d) Evaluate the decision of Wilson Onyango to close one of the stores for the year ended 31 March 2015.

Answer space for question 6 is on pages 33 to 38 of the question paper.

## SOURCE MATERIAL FOR USE WITH QUESTION 7

7. The Bengal Bay Metal Company plc produces tin cans. The directors have decided to build a new factory, and have to choose between two possible locations, Amillakat and Barigong. The directors have decided to evaluate the forecast figures for the next five years, in order to choose the better location.

## The following information is available concerning the two locations.

## Amillakat

- Location is in an industrial area, away from housing
- Cost of factory $£ 22$ million
- Running costs per year $£ 5$ million, which includes $£ 800000$ of depreciation per year

Barigong

- Location is in the city centre, near housing area
- A grant is available which reduces the cost of the factory to $£ 16$ million
- Running costs per year $£ 6.7$ million, which includes $£ 900000$ of depreciation per year

Sales will be 565 million tin cans per year, at a price of $£ 0.02$ ( 2 pence) per can, regardless of which location is selected.

The cost of capital for the factory will be $7 \%$. A table of discount factors for $7 \%$ is given below.

| Year | Discount Factor |
| :---: | :---: |
| 1 | 0.935 |
| 2 | 0.873 |
| 3 | 0.816 |
| 4 | 0.763 |
| 5 | 0.713 |

## Required:

(a) Explain the following accounting terms:
(i) payback period
(ii) accounting (average) rate of return
(iii) internal rate of return.
(b) Calculate the Net Present Value of the factory at each location after five years of operation.
(c) Evaluate the two possible locations on which to build the new factory.

Answer space for question 7 is on pages 39 to 42 of the question paper.

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