## X209/13/01

## NATIONAL <br> QUALIFICATIONS 2012

FRIDAY, 11 MAY
$1.00 \mathrm{PM}-4.00 \mathrm{PM}$

ACCOUNTING ADVANCED HIGHER

Candidates should attempt six questions in total, as follows.

## Section A

Question 1
and Question 2 or 3
and Question 4 or 5

## Section B

Question 6
and Question 7 or 8
and Question 9 or 10
Answers must be in ink. Answers in pencil will not be accepted, though incidental working may be in pencil.
All working should be shown fully and clearly labelled. Any incorrect figure not supported by adequate working will receive no marks. Candidates using calculators should pay particular heed.

Begin your answer to each question on a fresh page.

## SECTION A

## You should attempt 3 questions from this section.

## Question 1, AND Question 2 OR 3, AND Question 4 OR 5.

## 1. Part $\mathbf{A}$

The following balances were taken from the ledger accounts of Matthews plc on 31 December Year 2.
$10 \%$ Preference Shares of $£ 1$ each $\quad 100,000$
Ordinary Shares of $£ 0 \cdot 50$ each 187,500
$10 \%$ Debentures 100,000
Share Premium 30,900
Sales 525,700
Purchases 217,500
Wages and salaries 42,200
Rent and rates 15,000
Directors' emoluments 6,100
Discounts (Net) 700 Cr
Machinery (at cost)
400,000
Delivery Vans (at cost)
125,000
Provision for Depreciation Machinery 25,000
Delivery Vans 9,000
Investment income 4,500
Bank interest 2,300 Cr
Profit and Loss Account balance
(1 January Year 2)
5,265
Sundry administration expenses 7,980
Sundry distribution costs $\quad 17,825$
Debenture interest 5,000
Stock (1 January Year 2) 14,605
Vehicle expenses 4,220
Debtors 10,940
Creditors 9,330
Investments (Market Value $£ 105,000) \quad 100,000$
Bank
12,575 Dr
Dividends paid (see Note 7)

The following additional information is available.
1 Stock at 31 December Year 2 was $£ 25,500$.
2 The following accruals and prepayments were outstanding at 31 December Year 2.

|  | Accruals | Prepayments |
| :--- | ---: | :--- |
| Wages and Salaries | $£ 1,500$ |  |
| Rent and Rates |  | $£, 5,800$ |
| Audit Fee | $£ 10,200$ |  |

3 After allowing for accruals and prepayments the following expenses are to be allocated as follows.

| Expenses | Cost of Sales | Administration | Distribution |
| :--- | :---: | :---: | :---: |
| Wages and Salaries | $20 \%$ | $40 \%$ | $40 \%$ |
| Rent and Rates | $50 \%$ | $20 \%$ | $30 \%$ |

4 Depreciation for the year is to be charged as follows.
Machinery 25\% on cost
Delivery Vans $15 \%$ on written down value
5 Depreciation should be allocated as follows.

|  | Cost of Sales | Administration | Distribution |
| :--- | :---: | :---: | :---: |
| Machinery | $70 \%$ | Nil | $30 \%$ |
| Delivery Vans | Nil | Nil | $100 \%$ |

6 Corporation Tax of $£ 45,400$ is to be provided on this year's profit.
7 In addition to the above balances Matthews plc paid the Preference Dividends in full and an ordinary share dividend of $3 p$ per share.

You are required to:
(a) calculate the following totals to be included in the Published Profit and Loss Accounts of Matthews plc:
(i) Cost of Sales;
(ii) Distribution Expenses;
(iii) Administration Expenses.
(b) Prepare the Published Profit and Loss Account for Matthews plc for the year ended 31 December Year 2 and the Balance Sheet at that date in accordance with the best accounting practice.

## 1. (continued)

## Part B

The Managing Director provides you with the following information and asks you to calculate investment ratios for inclusion in the Annual Report.
The Market Price per Ordinary Share is $£ 1 \cdot 20$.
Calculate the following.
(a) Earnings per share
(b) Price Earning Ratio
(c) Dividend Yield 8
[Turn over for Question 2 on Page six
2. L Smith had the following assets and liabilities at 1 January Year 2.

|  | $£$ |
| :--- | ---: |
| Land and buildings (cost) | 250,000 |
| Motor Vehicles (cost) | 25,000 |
| Prepaid Insurance | 240 |
| Stock | 32,600 |
| Debtors | 32,000 |
| Creditors | 22,600 |
| Wages due | 500 |
| Bank | $22,500 \mathrm{Cr}$ |
| Provision for depreciation: |  |
| $\quad$ Motor Vehicles | 5,000 |
| Capital | 289,240 |

1 Smith provides for Depreciation monthly on the following basis.
Motor Vehicles - $20 \%$ straight line method.
2 Smith keeps a notebook where he records his receipts and payments during the year.

## Receipts

Cash takings banked
Debtors cheques
Additional Capital
Sale of motor vehicle on 1 July Year 2
(Costing $£ 7,500$ on 1 January Year 1 )
Total

$$
264,500
$$

## Payments

Rates 2,400
Wages and Salaries 42,500
Electricity $\quad 1,860$
Insurance $\quad 5,500$
Creditors
Total
$\begin{array}{r}123,400 \\ \hline 175,660 \\ \hline\end{array}$
3 The following amounts have been paid from his cash takings before they were banked.

Drawings - $£ 200$ per week
Purchases - £3,200
Repairs to buildings - $£ 2,900$
4 Smith took goods at a sales value of $£ 400$ from the business for his own use. Smith operates on a mark up of $25 \%$.
5 Stock was valued at $£ 29,500$ on 31 December Year 2.
6 One debtor owing $£ 4,300$ failed to pay and was declared bankrupt. A dividend of $£ 0 \cdot 20$ in the $£$, has been received.
7 Discount allowed during the year amounted to $£ 2,300$ and discount received $£ 745$.
2. (continued)

8 The following balances were outstanding at the end of the financial year.
Debtors - £28,000
Creditors - £19,200.
9 Smith decides to create a provision for doubtful debts of $5 \%$ per annum.
10 Accruals and prepayments at 31 December Year 2 were as follows.
Insurance prepaid - £300
Electricity due - £75.
From the above information you are required to prepare for the year ended 31 December Year 2:
(a) Trading and Profit and Loss Account.
(b) Calculate the following figures which would be included in the Balance Sheet at 31 December Year 2:
(i) Net Book Value of Motor Vehicles;
(ii) Bank Balance;
(iii) Closing Capital figure.

NB A Balance Sheet is not required.

## 3. Part $\mathbf{A}$

Use the Worksheet provided to answer both parts of this question.
Livingstone plc provided the following financial information for the year ended 30 June Year 3.
1 Changes in Current Assets/Liabilities.

| Stocks | $£ 20,000$ increase |
| :--- | :--- |
| Debtors | $£ 30,000$ decrease |
| Creditors | $£ 20,000$ increase |

2 Movements in Fixed Assets.

| BUILDINGS | EQUIPMENT | VEHICLES |
| ---: | ---: | ---: |
| $£ 000 ' s$ | $£ 000 ' s$ | $£ 000$ 's |

Acquisitions and Disposals
During the year:
Acquisitions 150
$200 \quad 60$
Disposals
(50)
(75)

Provisions for Depreciation
During the year:
Written off to Profit and Loss - 100 30
On disposals - (40)

## Revaluation of Assets

Increase in Value
200
3 Sales of Fixed Assets realised.

| Buildings | $£ 100,000$ |
| :--- | ---: |
| Equipment | $£ 30,000$ |
| Vehicles | $£ 10,000$ |

4 The Profit and Loss Account for the year ended 30 June Year 3 allowed for:
Debenture Interest Payable £,10,000
Ordinary Dividends £20,000
Corporation Tax $£ 25,000$
5 Unappropriated profit for the year ended 30 June Year 3 was $£ 80,000$.
6 Analysis of the Balance Sheets as at 30 June Year 2 and Year 3 identified the following.

## At 30 June Year 2 At 30 June Year 3

Corporation Tax Owing
Debenture Interest Owing
£ 30,000
£40,000
$£ 20,000$
$£ 20,000$

7 There were no changes made to Long-term financing during the year.
3. (continued)

Complete the necessary statements on the Worksheet provided to show for the year ended 30 June Year 3:
(i) Net Cash Inflow from Operating Activities;
(ii) Increase/Decrease in Bank balance.

## Part B

Livingstone plc's bank account was overdrawn by $£ 100,000$ at 30 June Year 2.
The directors wish to build a new factory in Bathgate costing $£ 500,000$ and to increase their bank balance to $£ 150,000$.

The Authorised Capital consists of 1,000,000 Ordinary Shares of 50p each. Issued Capital is currently 400,000 Ordinary Shares.

To finance this they decide to raise capital by:
(i) Issuing 300,000 £110\% Debentures;
(ii) Issuing Ordinary shares for the remainder of the sum required.

On the Worksheet provided calculate the Share Premium Livingstone plc require to attach to each share in order to raise the capital required.
4. Businesses use accounting ratios to compare their results of one year against those of another or to compare their results with those of a competitor.
(a) Identify and describe areas of financial performance that a Finance Manager might consider.
(b) Select 2 of these areas of performance and discuss 2 ratios for each that a Finance Manager might calculate and indicate their significance.
(NB marks will not be awarded for stating ratio formulae.)
(c) Discuss the limitations of ratio analysis when carrying out inter-firm comparisons.
5. Social Accounting is a diverse activity mainly concerned with offering a complementary form of accounting as opposed to the more usual economic and profit orientated accounting.
(a) Describe what is meant by the term Social Audit.
(b) Outline the social and environmental issues an organisation may wish to report on.
(c) Describe the benefits to an organisation of adopting a Social Accounting Policy.
[Turn over for Section B on Page twelve

## You should attempt 3 questions from this section.

## Question 6, AND Question 7 OR 8, AND Question 9 OR 10.

## 6. Part A

Thomson Ltd are manufacturers. Using existing machinery, running costs for Year 1 are expected to be $£ 150,000$ per annum, rising by $10 \%$ each year for the following 5 years.

Thomson's directors propose to invest in new machinery at the start of Year 1. The following estimated data relates to the proposed investment.
1 The new machinery will cost $£ 500,000$ and the existing machinery will realise $£ 20,000$ when sold at the start of Year 1.
2 The new machinery will have a life of 6 years after which it will be sold for $£ 50,000$.
3 In addition to the initial investment costs the following running costs will be incurred.

|  | Wages | Repairs | Other Costs |
| ---: | :--- | ---: | :--- |
|  | $£$ | $£$ | § |
| Year 1 | 33,000 | 7,000 | 92,000 |
| 2 | 35,000 | 8,500 | 96,000 |
| 3 | 37,000 | 9,500 | 93,000 |
| 4 | 39,000 | 10,500 | 95,000 |
| 5 | 41,000 | 12,000 | 94,000 |
| 6 | 43,000 |  | 98,000 |

4 The other costs in note 3 include straight line depreciation on the new equipment.

5 All cash flows other than those in notes 1 and 2 will be assumed to occur at the end of the relevant year.
(a) Calculate the net cash savings in annual running costs which would be made for each of Years 1-6 if the existing machinery is replaced under this proposal.
(b) Calculate for the proposed investment:
(i) the Payback period (to the nearest day);
(ii) the Accounting Rate of Return based on the average additional profit Thomson Ltd is estimated to make over the life of the new equipment;
(iii) the Net Present Value (assuming a discount rate of $12 \%$ ).

The discount factors at $12 \%$ are:
Year 10.893
$2 \quad 0.797$
$3 \quad 0.712$
40.636
$5 \quad 0.567$
$6 \quad 0.507$

## 6. Part A (continued)

(c) The Net Present Value of the investment at a discount rate of $15 \%$ is - $£ 1,201$.

Calculate the Internal Rate of Return for the proposed investment.

## Part B

Mitchell plc manufactures Product M. The following data apply to the 5 months ending 31 May Year 3.

1 Sales of Product M (in units)
January 6,000
February 7,200
March 8,600
April 9,500
May 8,000
2 The selling price will be $£ 12$ per unit in January and February, thereafter reducing to $£ 10$ per unit. $50 \%$ of each month's sales are for cash and the remainder sold on credit. A spot discount of $5 \%$ is given to cash customers only.
3 Production is, and will be, arranged so that at the end of each month unit stocks represent $60 \%$ of the next month's sales.

4 Each unit of Product M uses 2 kg of material costing $£ 3 \cdot 40$ per kg. Materials will be purchased one month before they are required for production.

Prepare the following budgets for the $\mathbf{3}$ months ended 31 March Year 3.
(a) Sales (in units and net value)
(b) Production (in units)
(c) Material Purchases (in units and value)

Propertyguard Ltd manufactures 'Texflo’ in 3 processes. The following data apply to May of Year 4.

## Raw Materials

Opening Stocks: Material A: 9,000 kg at $£ 1$ per kg Material B: $4,000 \mathrm{~kg}$ at $£ 2$ per kg
Purchased on 1 May: Material A: $40,000 \mathrm{~kg}$ at $£ 1 \cdot 70$ perkg Material B: $20,000 \mathrm{~kg}$ at $£ 2$ per kg

Raw materials are issued and charged to processes on a first in, first out basis.

## Process 3

Work in Progress at 1 May: 2,000 kg
(Materials - £2,460, Labour - £848, Overheads - £, 515)

Raw Materials added during the month: Material A 20,000 kg Material B $10,000 \mathrm{~kg}$
Other costs incurred during the month: Direct Labour - £ 12,000 Variable Overheads - $80 \%$ of Direct Labour Fixed Overheads - £6,000

Work in Progress at 31 May: 3,000 kg, complete as regards materials, $60 \%$ complete for labour and $50 \%$ complete for overheads.
Expected Process Losses: 5\% of total input weight.
The process accounts are prepared using Marginal Costing.
(a) Prepare statements to show:
(i) the equivalent unit production in May for each element of cost;
(ii) the cost per equivalent unit of each element of cost.
(b) Prepare the Process 3 Account for May.

Under abnormal circumstances total process losses can rise to $10 \%$ of total input weight, while all other data remain unchanged.
(c) Redraft the output section only of the Process 3 Account to show the effect of such process losses.

## 7. (continued)

## Part B

RG Manufacturing make products S and T in a single process. S and T sell for $£ 20$ and $£ 35$ respectively.

Joint production costs in March were $£ 45,000$.
Output in March: Product

$$
\begin{array}{ll}
\mathrm{S} & 3,000 \text { units } \\
\mathrm{T} & 1,500 \text { units }
\end{array}
$$

(a) Calculate the cost per unit and the profit per unit for each product if costs are apportioned on the basis of:
(i) the physical quantities produced;
(ii) the total sales value of units produced.

In April, demand for each product is expected to rise by one third. Joint production costs will increase pro rata, in addition to an increase of $£ 3,000$ in fixed costs.
(b) Calculate the new cost per unit and profit per unit for each product if costs are apportioned on the basis of the total sales value of units produced.
8. McLaughlin \& Winchester have provided the following information relating to the production and sale of Product Y.

## Product Y

Selling Price per carton of 25 units: Sales of 1-1,000 cartons £175
Additional sales above 1,000 cartons $£ 150$

## Unit Costs:

Direct Materials £2
Direct Labour £1
Variable Overhead £. 1
Under normal conditions Fixed Overheads are $£ 30,000$ per month and 25,000 units will be produced.

The following data apply to the 3 months ended 31 March Year 6 .

## Units

## Production

| January | 28,000 |
| :--- | :--- |
| February | 24,000 |
| March | 32,000 |

Stocks held
1 January 2,000

31 January 2,500
28 February $\quad 2,800$
31 March 4,000
Actual Fixed Overheads incurred
January £30,000
February £29,000
March £33,000
Prepare statements to show the profit earned in each of the 3 months January to March Year 6 using:
(a) Marginal Costing;
(b) Absorption Costing.
9. (a) Explain limiting factors and the implications these may have for decision making within a manufacturing organisation.
(b) Explain how a firm can maximise profits from a range of products when a limiting factor exists.
(c) Discuss reasons why a firm may choose a production mix which does not maximise profits.

Many firms routinely buy in some components from outside suppliers for the range of products they produce, whilst making other parts themselves.
(d) Explain how such practices may enable the firms to maximise profits.
(e) State the disadvantages of buying in large quantities of component parts.
10. (a) Explain the difference between the terms 'budgeted cost' and 'standard cost'.
(b) State the formula for each of the following variances.
(i) Sales Price
(ii) Sales Volume
(iii) Material Price
(iv) Material Usage
(v) Labour Rate
(vi) Labour Efficiency
(vii) Fixed Overhead Volume
(viii) Fixed Overhead Expenditure.
(c) Explain, for each of variances (i)-(viii) above, an underlying reason why the variance might arise.

## Note: Reasons such as 'an unexpected rise/fall in sales' will not be sufficient to gain marks.

(d) Explain why it is important to recognise costs as either controllable or non-controllable when carrying out a variance analysis.
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Worksheets for
Question 3 Parts A and B

Fill in these boxes and read what is printed below.


The Worksheets for Question 3 Parts A and B need only be completed if the question is attempted.

The Worksheets should be inserted inside the front cover of the candidate's answer book and returned with it.

## WORKSHEET FOR QUESTION 3 Part A

You should answer all of Question 3 Part A on this worksheet.
3. Part A
(a) (i)

Reconciliation of operating profit to net cash inflow from operating activities

| Operating Profit (before interest and taxation) | $\ldots$ | $\AA$ |
| :--- | :--- | :--- |
| Non Cash Adjustments |  |  |
| Changes in Working capital |  |  |

(a) (ii)

|  | $£$ | $£$ |
| :---: | :---: | :---: |
| Net cash inflow (outflow) from operating activities |  |  |
| Returns on investments and servicing of finance |  |  |
| Net cash inflow (outflow) from returns on investments and servicing of finance |  |  |
| Taxation |  |  |
| Capital expenditure and financial investments |  |  |
| Net cash inflow (outflow) from capital expenditure and financial investments |  |  |
| Equity dividend paid |  |  |
| Net cash inflow (outflow) before management of liquid resources and financing |  |  |
| Management of liquid resources and financing |  |  |
| Increase (decrease) in Cash/Bank during the Year |  |  |

## You should answer all of Question 3 Part B on this worksheet.

3. Part B

