## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS <br> General Certificate of Education Advanced Subsidiary Level and Advanced Level

## READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.
Write your Centre number, candidate number and name on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.
Answer all questions.
At the end of the examination, fasten all your work securely together.
The questions in this paper carry equal marks.
All accounting statements are to be presented in good style. Workings should be shown.
You may use a calculator.
The number of marks is given in brackets [ ] at the end of each question or part question.

1 Argy and Bargy were in partnership sharing profits and losses in the ratio of 2:1. The partnership's Balance Sheet at 30 April 2004 was:

|  |  | \$ | \$ |
| :---: | :---: | :---: | :---: |
| Fixed assets: | Freehold land |  | 5000 |
|  | Freehold buildings |  | 20000 |
|  | Equipment |  | 8000 |
|  |  |  | 33000 |
| Current assets: | Stock | 11000 |  |
|  | Debtors | 6000 |  |
|  | Bank | 2000 |  |
|  |  | 19000 |  |
| Less Current liabilities |  |  |  |
|  | Creditors | 3000 | 16000 |
|  |  |  | 49000 |
| Less Long term liability |  |  |  |
|  | Loan from Argy at 10\% |  | 4000 |
|  |  |  | $\underline{\underline{45000}}$ |
| Capital accounts: | Argy | 50000 |  |
|  | Bargy | $\underline{25000}$ | 75000 |
| Less Drawing accounts |  |  |  |
|  | Argy | (18000) |  |
| Bargy |  | (12000) | (30000) |
|  |  |  | $\underline{\underline{45000}}$ |

Shindig Ltd offered to purchase the partnership business. The offer was based on the following re-valuation of assets.

|  | $\$$ |
| :--- | ---: |
| Freehold land | 10000 |
| Freehold buildings | 16000 |
| Equipment | 5000 |
| Stock | 9000 |
| Debtors | 5000 |

Shindig Ltd would not take over the partnership bank account.
The purchase consideration was $\$ 62000$, settled as follows:

1. Argy received sufficient $8 \%$ debentures in Shindig Ltd to ensure that he continued to receive the same amount of interest as he had been entitled to on his loan to the partnership.
2. Shindig Ltd paid $\$ 12000$ into the partnership bank account.
3. The balance of the purchase price was settled in ordinary shares of $\$ 1$ each in Shindig Ltd at a price of $\$ 1.50$.

The shares were distributed among the partners in their profit/loss sharing ratios and any remaining balances on their Capital accounts were settled in cash.

## REQUIRED

(a) Prepare the partners' Capital accounts in columnar form to show the closing entries.

The Balance Sheet of Shindig Ltd at the 30 April 2004 before the purchase of the partnership business was:

|  |  | \$ | \$ |
| :---: | :---: | :---: | :---: |
| Fixed assets: | Leasehold buildings |  | 10000 |
|  | Office furniture |  | 2000 |
|  |  |  | 12000 |
| Current assets: | Stock | 20000 |  |
|  | Debtors | 12000 |  |
|  | Bank | 24000 |  |
|  |  | 56000 |  |
| Current liabilities: | Creditors | 14000 | 42000 |
|  |  |  | 54000 |
| Share capital and reserves |  |  |  |
| Ordinary shares of \$1 |  |  | 50000 |
| Profit and Loss Account |  |  | 4000 |
|  |  |  | $\underline{54000}$ |

## REQUIRED

(b) (i) Prepare the Balance Sheet of Shindig Ltd as it will appear after the purchase of the partnership business.
(ii) Describe how your answers to (a) and (b)(i) would have been different if Shindig Ltd had purchased the partnership assets only, instead of the partnership business.
[Total: 40]

2 Ersatz Ltd makes a product which passes through two processes. The budget for the production of 10000 units is as follows.

| Data per unit | Process 1 | Process 2 |
| :--- | :--- | :--- |
| Material | 4 kilos | 3 litres |
| Cost of material | $\$ 12$ per kilo | $\$ 7$ per litre |
| Labour hours per unit | 3 | 5 |
| Labour hourly rate | $\$ 15$ | $\$ 10$ |
| Production overhead recovery | $\$ 10$ per labour hour | $\$ 16$ per labour hour |

## REQUIRED

(a) Prepare budget statements for processes 1 and 2 to show the cost of producing 10000 units.

The actual production for process 1 was 10000 units. In process 2 , completed production was 9000 units and 1000 units were completed as to $50 \%$ of material and labour.

## REQUIRED

(b) Prepare a flexed budget statement for process 2 based on actual production.

Actual data per unit were as follows.

## Material

Cost of material
Labour hours
Labour hourly rate
Production overhead recovery

Process 1
4.2 kilos
$\$ 13.5$ per kilo
2.8
\$15.75
$\$ 10$ per labour hour

## Process 2

2.9 litres
\$7.3 per litre
5.25
\$9
\$16 per labour hour

## REQUIRED

(c) Prepare ledger accounts for process 1 and process 2 based on actual expenditure.
(d) Calculate the following variances:
process 1
(i) material price
(ii) material usage
process 2
(iii) labour efficiency
(iv) labour rate.
(e) Define the following, and state how they are treated in process accounts:
(i) by-products
(ii) waste products
(f) State four advantages which may result from using standard costs.

3 The directors of Makeit Ltd propose to buy a machine costing $\$ 300000$. At the end of five years the machine will be sold for $\$ 50000$. In each of the five years the machine will increase revenue by $\$ 160000$. Increased annual expenditure of $\$ 80000$ will be incurred.

Makeit Ltd will require an increase in working capital of $\$ 40000$. Machinery is depreciated on the straight line method.

## REQUIRED

(a) Calculate the accounting rate of return (ARR) which will result if the machine is purchased.

The directors have decided to calculate the payback period of the machine and have decided to discount future net receipts by the cost of capital which is $10 \%$.
The discounting factors at $10 \%$ are:
year $1 \quad 0.909$
20.826
$3 \quad 0.751$
$4 \quad 0.683$
$5 \quad 0.621$

## REQUIRED

(b) Calculate the discounted payback period for the machine. (It will be necessary to discount the net receipts.)

Makeit Ltd currently earns a return of $15 \%$ on its capital. The discounting factors at $20 \%$ are:

$$
\text { year } 1 \quad 0.833
$$

20.694
30.579
40.482
$5 \quad 0.402$

## REQUIRED

(c) (i) Calculate the internal rate of return (IRR).
(ii) State with reasons whether the directors should purchase the machine.

The directors believe that the various methods of appraising capital expenditure have advantages and disadvantages.

## REQUIRED

(d) State the advantages and disadvantages of using the following methods:
(i) accounting rate of return (ARR)
(ii) payback period
(iii) internal rate of return (IRR).

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