



ICM

SEPTEMBER 2015

COST ACCOUNTING

Instructions to candidates:

- a) Time allowed: Three hours (plus an extra ten minutes' reading time at the start – do not write anything during this time)
- b) Answer any FIVE questions
- c) All questions carry equal marks. Marks for each question are shown in []
- d) Non-programmable calculators are permitted in this examination

1. Within the context of cost and management accounting:

- a) Explain what you understand by **strategic planning**, giving examples. [6]
- b) How would you describe tactical level planning? Give examples. [6]
- c) Briefly explain what you understand by the terms **feedback** and **feedforward**. [8]

2. The following are the actual and budgeted data of Forecasters plc for the first period ended 30 November 2015:

	August	September	October	November
	£	£	£	£
Purchases	60,000	90,000	95,000	90,000
Overheads	23,000	24,000	25,000	26,000
Wages	24,000	25,000	27,000	23,000
Sales	140,000	130,000	170,000	190,000

Other Information:

- Debtors are given one month's credit
- Suppliers give one month's credit
- Overheads are paid one month in arrears
- 50% of sales are on a cash basis, and 50% are on a credit basis
- Overheads include £3,000 in respect of the depreciation of fixed assets
- Wages are paid in the month in which they are incurred
- New machinery costing £60,000 will be paid for in October
- The sale of machinery replaced will bring receipts of £8,000 in November
- The bank balance is estimated to be £2,000 on 1 September 2015

TASKS

- a) Prepare a Payments Schedule for three months to 30 November 2015. [5]
- b) Prepare a Receipts Schedule for three months to 30 November 2015. [4]
- c) Prepare a Cash Budget for the three months ending on 30 November 2015. [6]
- d) Comment on the budgeted cash position of Forecasters plc including any suggestions you consider appropriate. [5]

continued overleaf

3. Investec plc is about to bring a new product to the market. The following budgeted data has been prepared:

	£
Direct material cost per unit	20
Direct labour cost per unit	40
Variable overhead cost per unit	60
Selling price per unit	190
Fixed overhead cost	550,000

Planned production and sales – 15,000 units.

Maximum possible output – 20,000 units.

TASKS

- a) Calculate the original budgeted profit. [3]
- b) Calculate the original budgeted break-even point. [2]
- c) The marketing dept. believe that if an extra £80,000 was spent on marketing activities it would be possible to sell 14,500 units at a price of £200.00 per unit. Calculate the profit based on these estimates. [4]
- d) The production dept. believe if a cost reduction programme were introduced they could reduce the cost of direct materials and direct labour by 10% and variable overheads by 5%. Furthermore savings of £40,000 could be saved on fixed overheads. Calculate the profit based on selling 15,000 units at £190.00 per unit. [8]
- e) Explain which option you would recommend. [3]

4. The standard cost of making one unit is as follows:

Direct material	8 kilos at £3 per kilo
Direct wages	5 hours at £10 per hour

The actual cost of a batch of 1,000 units was:

Direct material	£24,980 (8,700 kilos)
Direct wages	£48,120 (5,110 hours)

TASKS

- a) Calculate the following:
 - i The material price variance
 - ii The material usage variance
 - iii The labour rate variance
 - iv The labour efficiency variance
 - v The total cost variance [2 each]
- b) Outline possible causes of the labour variances revealed in your answer. [4]
- c) Explain the principal benefits of operating a standard costing system. [6]

5. Atcost Construction plc has a building contract. The work started on 1 July 2013 with a budget for costs of £4,000,000 and a contract value of £5,500,000. No profit was taken on this job in the year ended 31 August 2014.

At the end of August 2015 (Atcost's year-end) the company had £3,800,000 of work certified as complete and had completed a further £200,000 of work which was not yet certified. They had received £3,400,000 cash payments from the client. They also had £90,000 of materials on site.

Other information includes:

	£000
Materials issued	1,900
Materials returned from site	80
Wages paid	540
Cost of capital equipment used on site	500
Cost of equipment hired	150
Site supervisors' salaries	290
Wages still owing	30
Allocation of head office costs	250

Depreciation of equipment is at 25% of equipment used on site.

TASKS

- a) Prepare the contract account for the year ended 31 August 2015. [10]
- b) Calculate the attributable profit based on the following formulae:
 - Surplus x 2/3 x cash received/certified value. [5]
 - The surplus is calculated by deducting cost of contract to date from work certified (balance on Contract Account).
- c) Explain the principle characteristics of Contract Costing. [5]

6. Capex plc has a capital budget available for investment in suitable projects this year, and has short-listed two possible choices. Details are as follows:

	Project X	Project Y
Capital cost	£2,400,000	£2,700,000
Expected life	5 years	5 years
Residual value	nil	nil
Budgeted cash inflows:	£000	£000
Year 1	190	310
Year 2	900	1,000
Year 3	1,200	1,300
Year 4	700	500
Year 5	400	200

The cost of capital to Capex is 9%

Extracts from NPV tables are as follows:

Year	9%	10%	11%
1	.920	.909	.893
2	.842	.826	.793
3	.772	.751	.712
4	.708	.683	.567
5	.650	.621	.507

TASKS

- Calculate the payback period for EACH project. [3]
 - Calculate the accounting rate of return (ARR) for EACH project. [4]
 - Calculate the Net Present Value (NPV) for EACH project. [8]
 - Explain which project you would recommend, mentioning EACH of the investment appraisal techniques in a), b) and c) above. [5]
7. Write notes on FOUR of the following:
- FIFO and AVCO
 - Economic Order Quantity (EOQ)
 - Equivalent Units
 - Normal Loss
 - Work Measurement
 - Labour Turnover Percentage [5 each]