



ICM

JUNE 2017

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
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1.
 - a) A company and its employees can benefit from a well-planned and organised **incentive scheme**. What would you suggest are the factors which would support and ensure a successful incentive scheme? [5]
 - b) What advantages may accrue to employers and employees of an incentive scheme? [5]
 - c) Explain the characteristics of the FIFO (first in first out) method of pricing issues from stores. [5]
 - d) What do you understand by **zero inventory** and how may it be achieved? [5]
 2. Atcost plc, a construction company, has a major project. The project started with a budget for costs of £4,200,000, and a contract value of £5,900,000.
At the end of April 2017 (Atcost's year end) the company had £4,000,000 of work certified as complete and had completed a further £200,000 of work which was not yet certified. They had received £3,600,000 cash payments from the client. They also had £70,000 of materials remaining on site.
Other information includes:

	£000
Materials issued	2,300
Materials returned from site	100
Wages paid	520
Wages owing	30
Cost of equipment used on site	400
Cost of equipment hired	110
Site supervisors' salaries	340
Allocation of head office costs	260

Depreciation of equipment is at 25% of cost.

TASKS

 - a) Prepare the contract account for the year ended 30 April 2017. [8]
 - b) Calculate the attributable profit based on the following formulae:
Surplus (on contract) x 2/3 x cash received/certified value [4]
NB: Surplus on contract is calculated as work certified complete less cost of work certified.
 - c) Explain the principal characteristics of contract costing. [4]
 - d) Suggest arguments against charging separate contracts with a proportion of head office costs. [4]

continued overleaf

3. The standard cost of making one unit is as follows:
 Direct material 3 kilos at £5 per kilo
 Direct wages 3 hours at £15 per hour
 The actual cost of a batch of 100 units was:
 Direct material £1,590 (341 kilos)
 Direct wages £4,325 (285 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. [4]
 c) Explain MBE (Management By Exception) in relation to standard costing. [6]

4. The following represent actual (May) and forecast (June, July and August) figures of Trader's plc for the first four months of its 2017 trading cycle:

	(actual) MAY £	(forecast) JUNE £	(forecast) JULY £	(forecast) AUGUST £
Sales	150,000	160,000	180,000	200,000
Purchases	75,000	80,000	90,000	100,000
Overheads	27,000	27,000	28,000	28,000
Wages	23,000	24,000	25,000	26,000

Other Information:

- 50% of sales are on a cash basis, and 50% are on a credit basis
- Debtors are given one month's credit
- Suppliers give one month's credit
- Overheads are paid one month in arrears
- Overheads include £4,000 in respect of the depreciation of fixed assets
- Wages are paid in the month in which they are incurred
- New equipment costing £55,000 will be paid for in July
- The sale of old equipment will bring proceeds of £6,000 in August
- The bank balance is predicted to be £13,000 on 1 June 2017

TASKS

- a) Prepare a monthly Receipts Statement for the period June – August 2017. [4]
 b) Prepare a monthly Payments Statement for the period June – August 2017. [4]
 c) Prepare a three month Cash Budget for the period June – August 2017. [6]
 d) Comment on the budgeted cash position of Trader's plc. [6]

5. As assistant management accountant to a small leisure group, you have been asked to provide budget figures on a proposal to open a restaurant at a Sports Centre.

DATA: Market research reveals costs; revenues; and volume of customers (covers) as follows:

	£
Average menu price per meal	30.00
Average variable cost of ingredients per meal	8.00
Other variable costs per meal	2.00
Fixed costs per week	3,000
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Budgeted number of covers (customers) per week is 250.

The restaurant has a capacity for 400 covers (customers) per week.

TASKS

- a) Calculate the budgeted weekly profit. [4]
 b) Calculate the break-even number of covers per week. [3]
 c) Calculate the margin of safety (in covers). [3]
 d) What does the margin of safety mean? [4]
 e) Calculate the profit/loss if there are 280 covers (customers) in a week. [3]
 f) What would profit/loss be if there are only 140 covers (customers) in a week? [3]

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

	Project Alpha	Project Beta
Capital cost	£2,500,000	£2,500,000
Expected life	5 years	5 years
Residual value	nil	nil
Budgeted cash inflows:	£000	£000
Year 1	350	500
Year 2	800	1,000
Year 3	1,100	1,200
Year 4	600	500
Year 5	400	300

The cost of capital to Capex plc is 8%

Extracts from NPV tables are as follows;

Year	8%	9%	10%
1	.926	.917	.909
2	.857	.842	.826
3	.794	.772	.751
4	.735	.708	.683
5	.680	.650	.621

TASKS

- Calculate the payback period for EACH project. [4]
- Calculate the NPV for EACH project. [6]
- Explain the term '**internal rate of return**' in the context of investment appraisal. [5]
- What are the benefits of conducting a 'post audit review' of a project? [5]

7. Write notes on FOUR of the following:

- Overhead absorption rates
- Abnormal loss
- Equivalent units
- Discounted payback
- Life cycle costing
- Benchmarking

[5 each]