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Serial No.....

Society of Certified Management Accountants of Sri Lanka

Technician Stage Pilot paper

Instructions to candidate

1. Time allowed is **three (3) hours**.
2. Answer **all** questions.
3. The answers should be given in the English Language.

<u>Subject</u>	<u>Subject Code</u>
Management Accounting Fundamentals	(MAF)

Question No: 1 (20 Marks)

Select the **most appropriate** answer and write the corresponding alphabet in your answer sheet.

1. _____ is part of an organisation's management information system for internal use only.
 - a. Financial accounting.
 - b. Management accounting.
 - c. Governmental accounting.
 - d. Not-for-profit accounting.
 - e. External auditing.
2. Which of the following statements about management accounting are true?
 - i. It is a part of an organisation's management information system.
 - ii. It is relied upon by managers to plan and control an organisation's operations.
 - iii. It is relied upon by external users to make investment decisions.
 - a. i and ii.
 - b. i, ii and iii.
 - c. iii.
 - d. ii.
 - e. i.

3. Refer to the following data.

	Rs.
Direct material used	150,000
Selling costs	5,000
Indirect labour	7,000
Administrative costs	10,000
Depreciation on factory equipment	70,000
Direct labour	40,000
Overtime wages paid	20,000
Indirect materials	45,000

The conversion costs are:

- a. Rs. 40,000.
 - b. Rs 150,000.
 - c. Rs 142,000.
 - d. Rs 182,000.
 - e. Rs 190,000.
4. Which of the following are components of conversion costs?
- a. Direct labour and direct materials
 - b. Indirect materials and manufacturing overhead
 - c. Direct labour and manufacturing overhead
 - d. Direct materials and manufacturing overhead
 - e. Direct labour and indirect labour.
5. The determination of cost behaviour is called:
- a. Cost estimation.
 - b. Cost prediction.
 - c. Cost behaviour.
 - d. Cost functions.
 - e. Cost activity.
6. Which of the following statements is true:
- a. Job costing traces costs to departments and process costing traces costs to products.
 - b. Job costing develops cost of products and process costing develops costs of processes.
 - c. Both job and process costing develop the cost of products.
 - d. Both job and process costing are concerned with the cost of departments.
 - e. Work in process is only used in process costing.
7. Which of the following is a key document in a typical process costing system?
- a. Departmental Production Report.
 - b. Master Schedule.
 - c. Production Budget.
 - d. Sequential Product Report.
 - e. Materials Requirement Reports.

8. Service organisations are characterised by:
- i. Intangible outputs.
 - ii. Zero inventories.
 - iii. High labour costs.
- a. i and iii
 - b. i and ii
 - c. ii and iii
 - d. i
 - e. iii
9. Service costs include:
- i. Design
 - ii. Production
 - iii. Purchasing
- a. ii and iii
 - b. i and iii
 - c. i and ii
 - d. ii
 - e. None of the above.
10. A control system comprises:
- a. Predetermined or standard performance level.
 - b. Measure of actual performance.
 - c. Comparison between standard and actual performance.
 - d. All of the above.
 - e. None of the above.
11. A cost variance is:
- a. The difference between the cost of a product and its selling price.
 - b. A measure of risk.
 - c. A necessary part of the production process.
 - d. The difference between the actual cost and the standard cost.
 - e. The difference between actual costs in two successive time periods.
12. A material price variance is shown by:
- a. $(PQ - SQ)$.
 - b. $(AP - SP)$.
 - c. $PQ (AP - SP)$.
 - d. $(PQ - SQ) (AP - SP)$.
 - e. $AP (PQ - SQ)$.
13. A standard cost is:
- a. The actual cost of a unit of production.
 - b. A budget for the production of one unit of a product or service.
 - c. Useful in calculating equivalent units.
 - d. The average cost within the industry.
 - e. The cost from prior years.

14. An unfavorable variable overhead spending variance indicates that:
- variable overhead items were not used efficiently
 - the price of variable overhead items was more than budgeted
 - the variable overhead cost-allocation base was not used efficiently
 - the denominator level was not accurately determined
 - more units being produced than planned.
15. An unfavorable variable overhead efficiency variance indicates that:
- variable overhead items were not used efficiently
 - the price of variable overhead items was more than budgeted
 - the variable overhead cost-allocation base was not used efficiently
 - the denominator level was not accurately determined
 - there is a favorable variable overhead spending variance
16. The concept of cost volume profit analysis is based on classifying costs as:
- Fixed and variable costs.
 - Variable product and period costs.
 - Product controllable and uncontrollable costs.
 - Both a and b.
 - Both a and c.
17. The break even point is that level of activity where:
- Total revenue equals total cost.
 - Total revenue equals fixed cost.
 - Total revenue equals variable cost.
 - Total revenue equals product cost.
 - c or d.
18. Which of the following items is NOT an assumption of CVP analysis?
- Costs may be separated into separate fixed and variable components.
 - Total revenues and total costs are linear in relation to output units.
 - Unit selling price, unit variable costs, and unit fixed costs are known and remain constant.
 - Proportion of different products will remain constant when multiple products are sold.
 - Total fixed cost remains constant.

The following information applies to questions 19 and 20:

KKL Ltd. sells a single product. 7,000 units were sold resulting in 70,000 of sales revenue, 28,000 of variable costs, and 12,000 of fixed costs.

19. Contribution margin per unit is
- 4.00
 - 4.29
 - 6.00
 - 6.29
 - None of these answers are correct.

20. The number of units that must be sold to achieve Rs. 60,000 of operating income is:

- a. 10,000 units
- b. 11,666 units
- c. 12,000 units
- d. 13,666 units
- e. None of these answers are correct.

(Total 20 marks)

Question No: 2 (22 Marks)

(a) Wills Pvt Ltd manufactures a product with the following standard costs:

Direct materials	40 metres @ Rs 2.70 per metre	Rs 108
Direct labour	8 hours @ Rs 18.00 per hour	Rs 144
Total standard prime cost per unit of output		Rs 252

The following information pertains to the month of July 2006:

Direct material purchased	42,000 metres @ Rs 2.76 per metre	= Rs 115,920
Direct material used	36,000 metres	
Direct labour	7,200 hours @ Rs 18.30 per hour	= Rs 131,760

Actual July 2006 production was 1,000 units.

You are required to;

Calculate the following variances for the month of July, indicating whether each variance is favourable or unfavourable:

- i. Direct material price variance.
- ii. Direct material quantity variance.
- iii. Direct labour rate variance.
- iv. Direct labour efficiency variance.

(12 Marks)

(b) Standard costs are said to be useful in controlling costs. Assume that the standard cost for raw materials per unit of finished product is Rs. 6.00 based on 3 kg at Rs. 2.00 per kg.

You are required to;

- i. Explain how such a standard can be used to evaluate performance.
- ii. Why is the degree of controllability important in utilising standard costs to evaluate performance?

(10 Marks)

(Total 22 Marks)

Question No: 3(17 Marks)

(a) The Mahajana Computer Co. Ltd requires 2,400 units per annum of a certain component for its manufacturing process. Over the past year it was found that while the average usage of these components was 200 per month, demand fluctuated between 190 and 220 units. Each component costs Mahajana Computer Co. Ltd Rs 10, and the supplier requires one week from the time of receiving the order to delivering the goods. The cost of each order is Rs 30, and the carrying cost is Rs 2.50 per unit.

You are required to;

- i. Calculate the EOQ.
- ii. Calculate the total cost of buying and carrying the components each year.
- iii. Assuming a normal level of safety stock is held, what is the reorder point?

(11 Marks)

(b) For each of the following activities, explain which of the objectives of management accounting is involved, i.e. planning, controlling and providing information for decision making. In some cases, several objectives may be involved:

- i. Developing a bonus reward system for the managers of the various offices run by a large travel agency.
- ii. Comparing the actual and planned cost of a consulting engagement completed by an engineering firm.
- iii. Determining the cost of manufacturing a piano.
- iv. Measuring the cost of the inventory of stereos on hand in a retail electronics store.
- v. Estimating the annual operating cost of a newly proposed branch store.
- vi. Measuring the following costs incurred during one month in a hotel owned by a national hospitality industry firm.

(06 Marks)

(Total 17 Marks)

Question No: 4 (20 Marks)

(a) Alex sells car batteries to service stations for an average of Rs. 30 each. The variable cost of each battery is Rs. 20 and monthly fixed manufacturing costs total Rs. 10,000. Other monthly fixed costs of the company total Rs.8, 000.

You are required to;

- i. What is the breakeven point in batteries?
- ii. What is the margin of safety, assuming sales total Rs. 60,000?
- iii. What is the breakeven level in batteries, assuming variable costs increase by 20%?
- iv. What is the breakeven level in batteries, assuming the selling price goes up by 10%, fixed manufacturing costs decline by 10%, and other fixed costs decline by Rs.100?

(16 Marks)

(b) Suppose a company decided to automate a production line. Explain what effects this would have on a company's cost structure using CVP terminology. Could these changes have any possible negative effect on the firm?

(04 Marks)

(Total 20 Marks)

Question No: 5(21 Marks)

(a) The Superior Company Ltd. refines a variety of chemical products. The following data is from the firm's Trinco plant.

Work in process, August 1		1,000,000 litres
	Direct material	100% complete
	Conversion	25% complete
Units started in process during August		475,000 litres
Work in process, August 31		120,000 litres
	Direct material	100% complete
	Conversion	80% complete

You are required to;

- Calculate the equivalent units of direct material and conversion for the month of August. Use the weighted average method of process costing.
- Repeat requirement (a) using the FIFO method. **(12 Marks)**

(b) Alloy Instruments Pvt. Ltd manufactures gauges for motor vehicle dashboards. The company has two production departments, Moulding and Assembly. There are three service departments, Maintenance, Personnel, and Engineering. The usage of these service departments' output during 2006 is presented below.

Provision of Service Output in 2006 (in hours of service)			
User of Service	Provider of Service		
	Personnel	Maintenance	Engineering
Personnel			
Maintenance	250		
Engineering	250	250	
Moulding	2,000	1,750	2,250
Assembly	2,500	2,000	750
Total	5,000	4,000	3,000

The budgeted costs in Alloy Instruments Pvt. Ltd's service departments during 2006 are as follows:

	Personnel (Rs)	Maintenance (Rs)	Engineering (Rs)
Variable	25,000	40,000	25,000
Fixed	100,000	75,000	150,000
Total	125,000	115,000	175,000

You are required to;

- Use the direct method to allocate Alloy Instrument Pvt Ltd's service department costs to its production departments.
- Use the step-down method to allocate the company's service department costs to its production departments. **(9 Marks)**

(Total 21 Marks)

End of question paper