

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

OCT 2024

DEPARTMENT OF ACCOUNTANCY

PROGRAMMES

Bachelor of Accountancy (Honours) Degree

COURSE: COST AND MANAGEMENT ACCOUNTING EXAMINATION PAPER 1(AC215)

Time: 3 hours.

INSTRUCTIONS TO CANDIDATES

1. Answer all questions.
2. No cell phones are allowed in the examination venue.
3. Use of silent and non-programmable calculators is allowed

SECTION A(MULTIPLE CHOICE:2 MARKS PER QUESTION)

1. Which expression best describes a semi-variable cost?
 - A. A cost which change as output changes
 - B. A cost which has a fixed cost element and a variable cost element
 - C. A sunk cost
 - D. A period cost
2. How are abnormal gains accounted for in the process account?
 - A. Debited in the process account at scrap value.
 - B. Debited in the process account at cost per unit of normal output.
 - C. Credited in the process account at the cost per unit of normal output.
 - D. None of the above.
3. Information relating to two processes Cleaning and Cutting was as follows:

Process	Normal loss	Input	Output
Cleaning	7%	7 000 litres	5 900 litres
Cutting	5%	4 000 litres	3 500 litres

Which statement below explains what happened in each process?

Cleaning	Cutting
A. Abnormal gain	Abnormal gain
B. Abnormal gain	Abnormal loss
C. Abnormal loss	Abnormal gain
D. Abnormal loss	Abnormal loss

Which statement below best describes the Direct allocation method?

- A. Considers that service departments offer each other services
 - B. Apportions service department costs to production departments only
 - C. Apportions service department costs to production departments in a specified order
 - D. Takes into account both direct and indirect costs when apportioning Overheads
4. An engineering firm operates a job costing system. Production overhead is absorbed at the rate of \$8.50 per machine hour. In order to allow for nonproduction overhead costs and profit, a mark-up of 60 per cent of prime cost is added to the production cost when preparing price estimates. The estimated requirements of job number 808 are as follows:
- Direct materials \$10 650
Direct labour \$3 260
Machine hours 140
- The estimated price notified to the customer for job number 808 will be:
- A. \$22 256
 - B. \$22 851
 - C. \$23 446
 - D. \$24 160
5. Which one of the following is classified as indirect labour?
- A. Salary of drivers in a goods transport company
 - B. Salary of accountants in an accounting firm
 - C. Salary of clerical staff in factory which manufactures furniture
 - D. Salary of repairs and maintenance workers in a power generation company

6. Canberra has established the following information regarding fixed overheads for the coming month:

Budgeted information: Fixed
overheads \$180 000

Labour hours 3 000

Machine hours 10 000

Units of production 5 000

Actual fixed costs for the last month were \$160 000.

Canberra produces many different products using highly automated manufacturing processes and absorbs overheads on the most appropriate basis.

What will be the predetermined overhead absorption rate?

- A. \$16
- B. \$18
- C. \$36
- D. \$60

7. Gadzirai Ltd uses machine hours to recover overheads. Budgeted manufacturing overhead was \$1 440 000 and actual manufacturing overhead incurred was \$1 476 000. During the year, the company absorbed \$1 428 000 of manufacturing overhead on 178 500 actual machine hours. What was the company's budgeted level of machine hours for the year?

- A. 184 500
- B. 180 000
- C. 175 000
- D. 182 000

8. The demand for a product K is 7 000 units for a six month period. Each unit of the product has a purchase price of \$40 and ordering costs are \$30 per order placed.

The annual holding costs of one unit of the product is 5% of its purchase price.

What is the economic order quantity of product K (to the nearest unit)?

- A. 459
 - B. 648
 - C. 864
 - D. 720
10. A domestic appliance retailer with multiple outlets sells a gas powered microwave for which the following information is available:

Average sales	30 per week
Maximum sales	40 per week
Minimum sales	24 per week
Lead time	6-10 weeks
Economic order quantity	600 units
Reorder level	550 units

Based on the above data, what is the maximum inventory level?

- A. 1 150 units
- B. 1 006 units
- C. 1 025 units
- D. 1 126 units

11. Carrying costs are included in the Economic Order Quantity Model. Which of the following are examples of carrying costs? (i) Leasing cost for warehouse

- (ii) Capital tied up in inventory
- (iii) Carriage inwards
- (iv) Risk of obsolescence

- A. (i) and (ii) only
- B. (i) and (iii) only
- C. (iii) and (iv) only
- D. (i), (ii) and (iv)

12. ABC Ltd absorbs production overheads using direct labour hours. The following budgeted and actual information applied in its last accounting

period:

	Budget	Actual
Production overhead	\$360 000	\$356 160
Direct labour hours	50 000	48 260
Units produced	40 000	38 760

At the end of the period, production overhead was reported as

- A. \$8688 over-absorbed
- B. \$7320 under-absorbed
- C. \$8688 under-absorbed
- D. \$7320 over- absorbed

13. Which observation is correct about cost and management accounting reports?

- A. The reports serve a stewardship function
 - B. The reports are used for decision making
 - C. The reports are regulated by International Financial Reporting Standards
 - D. The reports are used by shareholders
14. A company employs a production director to oversee the manufacturing activities of production function. How is the salary of the Production Director classified?
- A. As a direct labour cost
 - B. As an allocated expense
 - C. As an apportioned expense
 - D. As an administrative overhead
15. A company manufactures an agricultural chemical which is sold in 5 litre containers. The manufacturing process involves a 20% loss of a key raw material. What is the standard usage of the raw material per container?
- A. 6,25 litres
 - B. 6,00 litres
 - C. 5,00 litres
 - D. 4,00 litres

SECTION B (70 MARKS)

Question 1

A factory has three production departments. The company's policy is to recover overheads on a suitable basis for each production department. For the month of July 2023, the following data is given to you:

Department	Direct Materials (\$)	Direct Wages (\$)	Factory Overheads (\$)	Direct labour Hours	Machine Hours
Budget:					
Machining	650,000	80,000	360,000	20,000	80,000
Assembly	170,000	350,000	140,000	100,000	10,000
Packing	100,000	70,000	125,000	50,000	-
Actual :					
Machining	780,000	96,000	454,000	24,000	96,000
Assembly	136,000	270,000	84,000	90,000	11,000
Packing	120,000	90,000	161,000	60,000	-

Job no ZEC2023 ,which was done during the month had the following details:

Department	Direct materials (\$)	Direct wages(\$)	Direct Labour hours	Machine hours
Machining	1200	240	60	180
Assembly	600	360	120	30
Packing	300	60	40	-

The company adds 30% on the factory costs to determine the selling price.

Required:

- (a) Calculate the overhead absorption rates for each production department. (15 marks)

- (b) Determine the selling price of Job number ZEC2023. (5 marks)
- (c) Calculate the department wise and total under/over recovery of overheads. (7 marks)

[Total 27 marks]

Question 2

- (a) Discuss the explicit and implicit costs associated with :

- (i) Overstocking inventories (4 marks)
- (ii) Understocking inventories (4 marks)

- (b) The following information pertains to Hove Manufacturers:

Minimum lead time	2 weeks
Average lead time	4 weeks
Maximum lead time	6 weeks
Consumption (per week):	Normal 250 units
	Minimum 180 units
	Maximum 320 units
Costs per order	\$8
Carrying costs	\$0.95 per unit of average stock
Material X cost	\$15 per unit

Required:

Calculate the following for raw material X:

- (i) EOQ (use normal demand) (4 marks)

- (ii) Minimum stock level (4 marks)
- (iii) Re-order level (4 marks)
- (iv) Maximum stock level (4 marks)
- (v) Average Inventory Level (1 mark)

[Total marks: 25]

Question 3

A product is completed in two processes A and B. During April 2022, the input to process A of the basic raw material was 5,000 units at \$2 per unit. Other information for the month is as follows:

Details	Process A	Process B
Output (units)	4,700	4,536
Normal loss (% of input)	5	2
Scrap value per unit (\$)	4	5
Direct wages (\$)	3,000	5,000
Direct expenses (\$)	10,500	12 542

Total overheads amounted to \$16,000 and were apportioned to the process accounts in proportion to direct wages. There were no opening or closing work-in-progress inventories.

Required

Prepare the following ledger accounts for April 2022:

- (i) Process A (6 marks)
- (ii) Process B (6 marks)
- (iii) Abnormal loss (3 marks)
- (iv) Abnormal gain (3 marks)

[Total marks: 18]

END OF EXAMINATION PAPER