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M.Com. (CBCS) DEGREE EXAMINATION,
APRIL 2024.

Fourth Semester

Commerce – Core

APPLIED COSTING

(For those who joined in July 2021-2022 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL question, choose the correct answer.

1. Conversion cost excludes
 - (a) Labour cost
 - (b) Factory overheads
 - (c) Direct expenses
 - (d) Direct material cost
2. Factory overhead is also termed as Manufacturing overhead or
 - (a) Office overhead
 - (b) Selling overhead
 - (c) Distribution overhead
 - (d) Production overhead

3. Labour Turnover is

- (a) Productivity of Labour
- (b) Efficiency of Labour
- (c) Change in Labour force
- (d) None of these

4. Difference between attendance time and Job time is

- (a) Job time (b) Over time
- (c) Idle time (d) Production time

5. Joint costs of manufacturing are

- (a) Directly transferred to P&L A/c
- (b) Divided to the products produced in the process
- (c) Shown as deferred costs in Balance Sheet
- (d) None of these

6. Major purpose of ascertaining Equivalent production is

- (a) To ascertain cost of output
- (b) To find profit or loss
- (c) To control and reduce cost
- (d) None of these

7. Break even point is

- (a) Sales at which profit is high
- (b) Sales at which there is loss
- (c) Sales at which there is no profit or loss
- (d) None of the above

8. Marginal cost is

- (a) Prime cost (b) Variable cost
- (c) Work cost (d) Cost of production

9. A mixture of CPP and CAA methods is termed as method.

- (a) single (b) hybrid
- (c) multiple (d) all the above

10. An excess over a period of the current value of output sold over and above its current cost is termed as ———

- (a) operating income (b) revenue income
(c) net income (d) net operating income

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) From the following particulars compute the Cost of Production of a product:

	Rs.
Materials used	120
Labour employed	80
Salary of inspector engaged on this product	10
Proportionate lighting and heating (factory and office 3:2)	5
Proportionate depreciation, repairs and rent (50% is related to factory)	10
Municipal taxes and insurance of building (40% relates to office)	8
Trade subscription	1

Or

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- (b) From the following information, calculate
(i) Re-order Level, (ii) Maximum Stock Level, and (iii) Minimum Stock Level:

Re-order quantity	4,000 units
Minimum stock level to allow for emergencies	5 weeks
Average delivery time from suppliers	4 weeks
Maximum stock level allowed by management	20 weeks
Average rate of consumption per week	250 units
Minimum consumption in 4 weeks	800 units

12. (a) (i) Calculate the labour hour rate of a worker P from the following data:

Basic Pay	Rs.200 p.m
D.A	Rs.150p.m
Fringe Benefits	Rs. 100 p.m

Number of working days in a year 300.
30 days full pay and 20 days half-pay leave in a year is availed and allowed.
Assume 8 hourly day.

- (ii) What would be the effect on hourly rate if only 30 days full pay leave is allowed?

Or

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(b) The annual charges are incurred in respect of a machine in a shop where manual labour is almost nil and where work is done by means of five machines exactly of similar type and specifications.

(i)	Rent and Rates (proportional to the floor space occupied) for the Shop	4,800
(ii)	Depreciation on each machine	500
(iii)	Repairs and Maintenance for the five machines	1,000
(iv)	Power consumed (as per meter) @ 5p. per unit for the shop	3,000
(v)	Electric Charges for light in the shop	540
(vi)	Attendants: There are two attendants for the five machines and they are each paid Rs.60 per month	
(vii)	Supervision For the five machines in the Shop there is one supervisor whose emoluments are Rs.250 p.m	
(viii)	Sundry supplies such as Lubricants, Jute and Cotton Waste etc. for the shop	450
(ix)	Hire Purchase instalment payable for the machine (including Rs.300 as interest)	1,200

The machine uses 10 units of power per hour.
Calculate the machine hour rate for the machine for the year.

13. (a) 200 tonnes of raw material are used for producing a commodity which passes through two processes. The costs are as follows:

Particulars	Process I (Rs.)	Process II (Rs.)
Materials	2,000	—
Labour	1,000	500
Works Expenses	500	300

10% of the material is wasted in the process.
The wastage has been normal. The scrap realizes Rs.50. Show Process No. I Account.

Or

(b) The total joint costs of products A, B and C till the split-off point are Rs. 14. The market price of these products are Rs.6, Rs.9 and Rs.19 respectively. Costs of manufacture beyond the split-off point are Rs.2 in case of product A, Re.1 in case of product B and Rs.3 in case of product C. Allocate the joint costs on the market price method.

14. (a) Following information has been made available from the cost records of United Automobiles Ltd., manufacturing spare parts:

	Per Unit
Direct Materials	
X	Rs.8
Y	Rs.6
Direct Wages	
X	24 hours @ 25 paise per hour
Y	16 hours @ 25 paise per hour
Variable Overheads	150% of direct wages
Fixed Overheads (total)	Rs.750
Selling Price	
X	Rs.25
Y	Rs.20

The directors want to be acquainted with the desirability of adopting any one of the following alternative sales mixes in the budget for the next period.

- 250 units of X and 250 units of Y
- 400 units of Y only
- 400 units of X and 100 units of Y
- 150 units of X and 350 units of Y

State which of the alternative sales mixes you would recommend to the management.

Or

- (b) The budget of AB Ltd. includes the following data for the forthcoming financial year:

(i) Fixed expenses	Rs.3,00,000
(ii) Contribution per unit	Product X — Rs.6
	Product Y — Rs.2.50
	Product Z — Rs.4
(iii) Sales forecast	Product X — 24,000 units @ Rs. 12.50
	Product Y — 1,00,000 units @ Rs.7.00
	Product Z — 50,000 units @ Rs.10.00

Calculate the Composite P/V ratio and composite BEP.

15. (a) Explain the performance evaluation under responsibility accounting involves reporting principles and mention the various principles to be followed for a good management reporting systems.

Or

- (b) From the following details ascertain (i) Cost of Sales and (ii) Closing Inventory as per CPP Method when the firm is following FIFO Method.

	Historical (Rs.)	Price Index
Opening stock on 1.1.1991	4,000	80
Purchase during 1991	20,000	125
Closing Stock (out of purchases made in the last quarter)	3,000	120
Index No. on 31 st December, 1991	140	

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

16. (a) The following particulars relating to the year 2000 have been taken from the books of a chemical works, manufacturing and selling a chemical mixture.

	Kg.	Rs.
Stock on 1 st January, 2000:		
Raw materials	2,000	2,000
Finished mixture	500	1,750
Factory stores		7,250

	Kg.	Rs.
Purchases:		
Raw materials	1,60,000	1,80,000
Factory stores		24,250
Sales:		
Finished mixture	1,53,050	9,18,000
Factory scrap		8,170
Factory wages		1,78,650
Power		30,400
Depreciation on Machinery		18,000
Salaries:		
Factory		72,220
Office		37,220
Selling		41,500
Expenses:		
Direct		18,500
Office		18,200
Selling		18,000
Stock on 31 st December, 2000:		
Raw materials	1,200	
Finished mixture	450	
Factory stores		5,550

The stock of finished mixture at the end of 2000 is to be valued at the factory cost of the mixture for that year. The purchase price of raw materials remained unchanged throughout 2000.

Prepare a statement giving the maximum possible information about cost and its break-up for the year 2000.

Or

- (b) "Costs may be classified in a variety of ways according to their nature and, the information needs of management." — Explain.

17. (a) Justify the causes of idle time.

Or

- (b) You are supplied with the following information and are required to work out the secondary distribution of service department overheads under simultaneous equation method.

	Production departments			Service departments	
	A	B	C	p	Q
Total overhead as per					
Primary distribution (Rs.)	7,810	12,543	4,547	4,000	2,600

Expenses of service departments P and Q are apportioned as under:

	A	B	C	P	Q
P	30%	40%	20%	—	10%
Q	10%	20%	50%	20%	—

18. (a) A product passes through two processes and then to finished stock. The normal wastage of each process is as follows:

Process A 30% and Process B 5%

The wastage of process A was sold @ Rs.5 per unit and that of process B at Rs.10 per unit. 20,000 units were introduced into process A at the beginning of January 2007 at a cost at Rs.40 per unit.

Other expenses were as under:

	Process A (Rs.)	Process A (Rs.)
Sundry materials	40,000	60,000
Wages	2,00,000	3,20,000
Manufacturing expenses	30,000	28,500

The output of process A was 19,000 units and that of process B 18,200 units. Prepare the Process Account, Normal loss account, Abnormal loss account and Abnormal gain account.

Or

- (b) Four products M, N, O and P are produced out of a single process, their joint cost till split off being Rs.6,000. Without any further processing, they are sold at Rs. 10, Rs.3, Rs.5 and Rs.2 respectively. The output during January was M-500 kgs; N-300 kgs; O-200 kgs and P-300 kgs.

Apportion the Joint cost on:

- (i) Sale price at split off point basis
- (ii) Sales value at split off point basis.

19. (a) The sales turnover and profit during two years were as follows:

Year	Sales (Rs.)	Profit (Rs.)
2006	1,40,000	15,000
2007	1,60,000	20,000

Calculate:

- (i) P/V Ratio (ii) Break-even point (iii) Sales required to earn a profit of Rs.40,000 (iv) Fixed expenses and (v) Profit when sales are Rs. 1,20,000.

Or

- (b) The PY Ratio of a firm dealing in precision instruments is 50% and margin of safety is 40%.

You are required to work-out break even point and the net profit if the sales volume is Rs.50,00,000. If 25% of variable cost is labour cost, what will be the effect on BEP and profit when labour efficiency decreases by 5%.

20. (a) Define the term activity based costing. Discuss its uses and problems.

Or

- (b) From the following information, calculate the 'cost of sales adjustment'.

	H.C.A. Rs.	Index of goods
Opening stock of materials as on 1.1.98	10,000	200
Purchase of Materials	80,000	
Closing stock of materials as on 31.12.98	14,100	235 (when this purchase was made)

Price index as on 31.12.1998 was 240. You may presume that materials are consumed uniformly throughout the year generally a month after the date of individual purchases. Rise in prices is also uniform throughout the year.
