INTERMEDIATE EXAMINATION

June 2024

P–8(CA)
Syllabus 2022

COST ACCOUNTING

Time Allowed: 3 hours Full Marks: 100

The figures in the margin on the right side indicate full marks.
Where considered necessary, suitable assumptions may be made and clearly indicated in the respective answer.

All working notes must from part of the answer.

Section-A

Answer Question No. 1, which is Compulsory.

1. Choose the correct answer from the given alternatives (You may write only the Roman numeral and the alphabet chosen for your answer): 2×15=30

(i) ______________ is a method of dealing with overheads which involves spreading common costs over cost centres on the basis of benefit received.

(A) Overhead analysis
(B) Overhead apportionment
(C) Overhead allocation
(D) Overhead absorption

(ii) Which of the following CAS deals with the principles and methods of determining the Production and Operation Overheads?

(A) CAS - 2
(B) CAS - 3
(C) CAS - 5
(D) CAS - 10

(iii) Hotel Dream House is having 250 rooms of which 70% are normally occupied in summer and 40% are occupied in winter. Period of summer and winter be taken as 6 months each and normal days in a month be assumed to be 30. What is the value of total occupied room days?

(A) 31,500 room days
(B) 45,000 room days
(C) 36,000 room days
(D) 49,500 room days

(iv) In which of the following methods of pricing, costs lag behind the current economic values?

(A) Replacement price method

(B) Weighted average price method

(C) FIFO price method

(D) LIFO price method

(v) A Lorry starts with a load of 40 Metric Tonnes (MT) of goods from Station 'A'. It unloads 16 MT in Station 'B' and the balance goods in Station 'C'. On return trip, it reaches Station 'A' with a load of 32 MT, loaded at Station 'C'. The distance between A to B, B to C and C to A are 40 kms, 60 kms and 80 kms respectively. On the basis of above information, "Commercial MT-kilometers" are –

(A) 5,600 MT-kilometers

(B) 5,760 MT-kilometers

(C) 6,200 MT-kilometers

(D) 6,450 MT-kilometers

(vi) In a process 800 units are introduced during 2023-24. 5% of input is normal loss. Closing work-in-progress 60% complete is 100 units. 660 completed units are transferred to next process. Equivalent production for the period is ___________.

(A) 900 units

(B) 744 units

(C) 540 units

(D) 720 units

(vii) Following information is available :

Opening stock	₹ 4,000
Closing stock	₹ 6,400
Material consumed	₹ 31,200

On the above basis, what is the Inventory Turnover Ratio?

(A) 7.8

(B) 5

(C) 6

(D) 3

(viii) When P/V ratio is 20% and margin of safety ratio is 30%, profit is ___________ of sales.

(A) 4%

(B) 6%

(C) 8%

(D) 10%

(ix) In P Ltd., labour force at the beginning of July 2023 was 3,800 and at the end of July 2023 was 4,200. During the month, 50 workers left while 80 workers were discharged. 560 workers were engaged out of which only 60 were appointed in the vacancy created by the number of workers separated and the rest on account of expansion scheme. On the basis of above information, Labour Turnover Ratio of the firm by Flux Method is ___________.

(A) 14.00%

(B) 3.25%

(C) 1.50%

(D) 8.63%

(x) If an organisation has all the resources it needs for production, then the principal budget factor is most likely to be ___________.

(A) Cash supply

(B) Sales demand

(C) Raw materials

(D) Labour supply

(xi) The sum of direct labour and factory overheads is termed ___________.

(A) Sunk cost

(B) Opportunity cost

(C) Direct cost

(D) Conversion cost

(xii) RST & Co. has set up a laboratory for testing of products for compliance with standards. Salary of this laboratory staff is a part of ___________.

(A) Direct expenses

(B) Works overhead

(C) Quality control cost

(D) Research and development cost

(xiii) A company requires 1,00,000 units of an item annually. The cost per unit is ₹ 10. Ordering cost is ₹ 500 per order and inventory carrying cost is 50% per unit per annum. The Economic Order Quantity (EOQ) in this case is ________________.

(A) 4,470 units

(B) 4,472 units

(C) 6,420 units

(D) 6,472 units

(xiv) Which of the following method is used for evaluation of equivalent production when prices are fluctuating in the market?

(A) FIFO method

(B) LIFO method

(C) Simple average method

(D) Weighted average method

(xv) In the year 2023-24, X & Co. used 2,820 kg of material at a total standard cost of ₹ 11,562. The material usage variance was ₹ 123 (Favourable). In the above case, Standard Weight of Material (SQ) for the period is ________________.

(A) 2,900 kg.

(B) 2,850 kg.

(C) 3,048 kg.

(D) 2,648 kg.

Section-B

Answer *any five* questions from question number 2 to 8.

Each question carries 14 marks. 14×5=70

2. (a) PQR & Co. is an advertising agency which has received an enquiry to submit the quotation. Bill of Materials prepared by the production department for the quotation states the following requirement of materials:

Paper 20 reams @ ₹ 2,200 per ream	
Ink and other printing material	₹ 8,000
Binding material and other consumables	₹ 4,000

Some photography is required for the job. The agency does not have a photographer as an employee. It decides to hire one by paying ₹ 20,000 to him. Estimated job card prepared by production department specifies that service of following employees will be required for this job:

Artist (₹ 18,000 per month)	80 hours
Copywriter (₹ 15,000 per month)	75 hours
Client servicing (₹ 13,500 per month)	30 hours

The primary packing material will be required to the tune of ₹ 6,000. Production Overheads 40% of Prime cost, while the Selling and Distribution Overheads are likely to be 20% on Production cost. The agency works 25 days in a month and 6 hours a day. The agency expects a profit of 20% on the quoted price.

Required:

Prepare a Statement of Profit showing quotation price. 7

(b) The following particulars for the first week of July, 2023 relate to R, S and T three workers employed in Sun Ltd.:

	R	S	T
(a) Job completed (units)	5,000	4,000	7,200
(b) Out of above output rejected and unsaleable (units)	200	80	800
(c) Time allowed for 100 units	2 hrs. 36 min.	3 hrs.	1 hr. 30 min.
(d) Basic wage rate per hour (₹)	25	40	30
(e) Time taken (hours)	100	108	92

The normal working hours per week are fixed at 88 hours. Bonus is paid @ 60% of the basic wage rate for gross time worked and gross output produced without deduction for rejected output. The rate of overtime for first 10 hours is paid at time plus 1/3 and for next 10 hours is paid at time plus 1/2.

Required:

Calculate the following for each worker:

(i) Number of bonus hours and amount of bonus earned.

(ii) Total wages earned including basic wages, overtime premium and bonus.

(iii) Direct wages cost per 100 saleable units. 7

3. (a) MOON LTD. has three Production Departments and two Service Departments. The overhead distribution sheet of the company showed the following totals:

Production Department:	**Amount (₹)**
A	3,02,000
B	2,88,000
C	3,86,000
Service Department:	
X	46,250
Y	15,750

Working hours of production departments are A-12,452 hours; B-8,056 hours and C-8,132 hours. Given that the two service departments cater to the needs of the three production departments as per the following schedule (in percentage):

	A	B	C	X	Y
Department X	20%	30%	40%	-	10%
Department Y	40%	20%	30%	10%	-

Required:

(i) Calculate the total overhead of production departments distributing the cost of service departments by Simultaneous Equation Method.

(ii) Calculate the overhead rate per hour of production departments. 7

(b) Pass the journal entries for the following transactions in a double entry cost accounting system:

(Narration is not required) 7

Particulars	**Amount (₹)**
(i) Issue of material:	
- Direct	5,00,000
- Indirect	2,50,000
(ii) Allocation of wages and salaries:	
- Direct	3,00,000
- Indirect	50,000
(iii) Overheads absorbed in jobs:	
- Factory	2,80,000
- Administration	1,00,000
- Selling	50,000
(iv) Under/over absorbed overheads:	
- Factory (over)	30,000
- Administration (under)	15,000

4. (a) ACODA Ltd. runs a holiday home in a small hill station. It has three types of suites for its customers with a capacity of 200 single rooms, 100 double rooms and 60 triple rooms. The average occupancy of single, double and triple rooms is expected to be 80%, 80% and 60% respectively. The rent for double room has been fixed at 125% and for triple room 150% of the rent of a single room. The costs are as under:

Variable costs:	Single rooms	₹ 220 each per day
	Double rooms	₹ 340 each per day
	Triple rooms	₹ 400 each per day
Fixed costs:	Single rooms	₹ 120 each per day
	Double rooms	₹ 240 each per day
	Triple	₹ 320 each per day

The holiday home runs throughout the year of 365 days and earns a margin of 20% on rent of rooms.

Required:

Calculate the rent to be charged for each type of suite (room). 7

(b) MR. JOHN who prepares his accounts on 31st March each year, commenced a Contract No. A-26 on 1st July, 2022. The following information is revealed from his costing records on 31st March, 2023:

Particulars	(₹)
Materials cost	2,51,000
Labour cost	5,65,600
Foreman's salary	81,300

A machine costing ₹ 2,60,000 remained in use on site for two-fifth of the year. Its working life is estimated at 7 years and final scrap value at ₹ 15,000.

A supervisor is paid ₹ 8,000 per month and has devoted one-half of his time on the contract.

All other expenses amount to ₹ 1,36,500. Materials at site on 31st March, 2023 cost ₹ 35,400.

The contract price is ₹ 20,00,000. On 31st March, 2023 two-third of the contract was completed, however, the architect gave certificate only for 50% of the contract price and ₹ 7,50,000 had so far been paid on account.

Required:

Prepare Contract Account for the year ended on 31st March, 2023 showing the amount of profit/loss to be transferred to the Profit and Loss Account. 7

5. (a) XYZ Ltd. processes 1,50,000 kg. of raw materials in a month to produce two products, viz. P and Q.

The cost of raw material is ₹ 8 per kg.

The process costs per month are:

Direct Materials	₹ 3,50,000
Direct Wages	₹ 2,80,000
Variable Overheads	₹ 2,35,000
Fixed Overheads	₹ 1,45,000

The loss in process is 5% of input and the output ratio of P and Q which emerge simultaneously is 1:2. The selling prices of the two products at the point of split off are: P - ₹ 12 per kg. and Q - ₹ 20 per kg.

A proposal is available to further process the product P by mixing it with other purchased materials. The entire current output of P can be processed further to obtain a new product 'S'. The price per kg. of 'S' is ₹ 15 and each kg. of output of 'S' will require 1 kg. of input P. The cost of processing of P into 'S' (including other materials) is ₹ 1,85,000 per month.

Required:

Prepare a statement showing monthly profitability based both on the existing manufacturing operations and on further processing. Will you recommend further processing?

Note: Apportionment of joint costs are made on sales value basis by the company. 7

(b) J & M Ltd. submits the following information regarding composition and wage rates of labour force engaged on Job No. R-40 which is scheduled to be completed in 80 hours:

Category of workers	Standard		Actual	
	No. of workers	Hourly wage rate per worker (₹)	No. of workers	Hourly wage rate per worker (₹)
Grade – P	60	2.50	55	3.00
Grade – Q	40	1.75	30	2.00
Grade – R	50	1.25	70	1.00

The work is actually completed in 88 hours.

Required:

Calculate the following:

(i) Labour Cost Variance
(ii) Labour Rate Variance
(iii) Labour Efficiency Variance
(iv) Labour Revised Efficiency Variance
(v) Labour Mix Variance 7

6. Aristocrat Ltd. while operating at 70% level of activity produces and sells two products A and B. The cost and sales data of these two products are as under:

(₹ per unit)

		Product A	**Product B**
Units Produced and Sold		**3,000**	**2,000**
Direct Materials		10	20
Direct Labour		20	20
Factory Overheads	(40% fixed)	25	15
Administration & Selling Overheads	(60% fixed)	40	25
Total Cost per unit		95	80
Selling Price per unit		115	95

Factory overheads are absorbed on the basis of machine hour which is the limiting factor. The machine hour rate is ₹ 10 per hour.

Aristocrat Ltd. receives an offer from USA for the purchase of product A at a price of ₹ 87.50 per unit. Alternatively, the company has another offer from UK for the purchase of product B at a price of ₹ 77.50 per unit. In both the cases, a special packing charge of ₹ 2.50 per unit has to be borne by the company. The company can accept either of the two export orders by utilising the balance 30% of its capacity.

Required:

Examine and advise the company as to which proposal should be accepted showing total profit in your support after incorporating the export proposal suggested by you. 14

7. (a) Jack & Jones Ltd. submits the following budgeted figures of revenue and expenditures for the month of July to December, 2023:

Month	Sales (₹)	Purchases (₹)	Wages (₹)	Expenses (₹)
July	13,00,000	8,00,000	2,40,000	1,00,000
August	14,00,000	9,60,000	3,00,000	1,00,000
September	15,00,000	9,00,000	3,00,000	1,20,000
October	16,00,000	9,60,000	3,60,000	1,20,000
November	16,40,000	8,00,000	3,60,000	1,60,000
December	17,80,000	10,00,000	4,00,000	1,60,000

The following further information is available:

(i) 10% of purchases and sales are on cash basis.

(ii) Advance payment of income tax in December, 2023 is ₹ 2,00,000.

(iii) Plant purchased and price to be paid in October, 2023 is ₹ 80,000.

(iv) Time lag –

Credit sales	2 months
Credit purchases	1 month
Wages	½ month
Expenses	½ month

Required:

Prepare a Cash Budget for 3 months starting on 1st October, 2023 when cash balance is ₹ 2,70,000. 7

(b) (i) Mr. X, the Chairman of ABC Ltd. wants to know the advantages of adopting Cost Accounting Standards (CAS) in his company. You are required to prepare a list of advantages of adopting CAS for submitting to Mr. X.

(ii) Explain the functions of Cost Accounting Standards Board (CASB).

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8. (a) State the essentials of a Cost Accounting System. 4

(b) Discuss the advantages of ABC analysis. 5

(c) Explain Idle Time as per CAS–7. Also discuss the treatment of idle time in Cost Accounts as per CAS–7. 5