

**MOCK TEST PAPER –2**

**INTERMEDIATE: GROUP – I**

**PAPER – 3: COST AND MANAGEMENT ACCOUNTING**

Answers are to be given only in English except in the case of the candidates who have opted for Hindi medium. If a candidate has not opted for Hindi medium his/ her answer in Hindi will not be valued.

Question No. 1 is compulsory.

Attempt any **four** questions from the remaining **five** questions.

Working notes should form part of the answer.

**Time Allowed – 3 Hours**

**Maximum Marks – 100**

1. Answer the following:

- (a) R Ltd. is facing increasing employee turnover in the factory and before analyzing the causes and taking remedial steps; the management wants to have an idea of the profit foregone as a result of employee turnover in the last year.

Last year sales amounted to ₹ 99,63,960 and P/V ratio was 20%.

The total number of actual hours worked by the direct employee force was 5.34 lakhs. The actual direct employee hours included 36,000 hours attributable to training new recruits, out of which half of the hours were unproductive. As a result of the delays by the Personnel Department in filling vacancies due to employee turnover, 1,20,000 potentially productive hours (excluding unproductive training hours) were lost.

The costs incurred consequent on employee turnover revealed, on analysis, the following:

Settlement cost due to leaving	₹ 52,584
Recruitment costs	₹ 32,088
Selection costs	₹ 15,300
Training costs	₹ 36,588

Assuming that the potential production lost as a consequence of employee turnover could have been sold at prevailing prices, FIND the profit foregone last year on account of employee turnover.

- (b) A contractor prepares his accounts for the year ending 31st March each year. He commenced a contract on 1st July, 2021.

The following information relates to the contract as on 31<sup>st</sup> March, 2022:

(₹)

Material issued	7,53,000
Wages	16,96,800
Salary to Foreman	2,43,900

A machine costing ₹ 7,80,000 has been on the site for 146 days, its working life is estimated at 7 years and its final scrap value at ₹ 45,000.

A supervisor, who is paid ₹ 24,000 p.m. has devoted one-half of his time to this contract.

All other expenses and administration charges amount to ₹ 4,09,500.

Material in hand at site costs ₹ 1,06,200 on 31st March, 2022.

The contract price is ₹ 60,00,000. On 31st March, 2022 two-third of the contract was completed. The architect issued certificates covering 50% of the contract price, and the contractor had been paid ₹ 22,50,000 on account.

PREPARE Contract A/c and show the notional profit or loss as on 31st March, 2022.

- (c) Following information is available for A Ltd.:

Sales-

P: 200 kg @ ₹ 120 per kg.

Q: 240 kg @ ₹ 60 per kg.

Joint costs-

Marginal cost ₹ 17,600

Fixed cost ₹ 15,600

You are required to FIND OUT the cost of joint products P and Q using contribution margin method.

- (d) F Ltd. requires you to PREPARE the Master budget for the next year from the following information:

Sales ₹ 1,20,00,000

Direct material cost 60% of sales

Direct wages 20 workers @ ₹ 2,250 per month

Factory overheads:

Indirect labour –

Works manager ₹ 7,500 per month

Foreman ₹ 6,000 per month

Stores and spares 2.5% on sales

Depreciation on machinery ₹ 1,89,000

Light and power (fixed) ₹ 45,000

Repairs and maintenance ₹ 1,20,000

Other sundries 10% on direct wages

Administration, selling and distribution expenses ₹ 5,40,000 per year

**(4 × 5 Marks = 20 Marks)**

2. (a) Company manufacture and sell 3 types of mobile handset. It also manufactures wireless charger for mobile. The company has worked out following estimates for next year.

	Annual Demand (in units)	Selling Price (₹ per unit)	Material cost (₹ per unit)	Labour cost (₹ per unit)
X5	5,000	8,000	2,000	1,000
X6	4,000	9,000	2,500	1,500
X7	3,000	12,000	3,000	2,000
Wireless Charger	15,000	1,500	300	200

To encourage the sale of wireless charger a discount of 10% in its price is being offered if it were to be purchased along with mobile. It is expected that customer buying mobile will also buy the wireless charger. The company factory has an effective capacity of 35,000 labour hours. The labour is paid @ ₹ 500 per hour. Overtime of labour has to be paid at double the normal rate. Other variable cost work out to be 50% of direct labour cost and fixed cost is ₹ 1,00,00,000. There will be no inventory at the end of the year.

PREPARE statement of profitability.

**(10 Marks)**

- (b) Rounak Minerals Ltd. operates in iron ore mining through open cast mining method. Explosives and detonators are used for excavation of iron ores from the mines. The following are the details of standard quantity of explosives materials used for mining:

Particulars	Rate (₹)	Standard Qty. for Iron ore	Standard Qty. for Overburden (OB)
SME	40.00 per kg.	2.4 kg per tonne	1.9 kg per cubic- meter
Detonators	20.00 per piece	2 pcs per tonne	2 pcs per cubic-meter

The standard stripping ratio is 3:1 (means 3 cubic- meter of overburden soil to be removed to get one tonne of iron ore).

During the month of December 2021, the company produced 20,000 tonnes of iron ore and removed 58,000 cubic- meter of OB. The quantity of explosive materials used and paid for the month is as below:

Material	Quantity	Amount (₹)
SME	1,67,200 kg.	63,53,600
Detonators	1,18,400 pcs	24,27,200

You are required to COMPUTE:

- (i) Material price variance
- (ii) Material quantity variance
- (iii) Material cost variance.

**(10 Marks)**

3. (a) M/s SE Traders is a distributor of an electronic items. A periodic inventory of electronic items on hand is taken when books are closed at the end of each quarter. The following information is available for the quarter ended on 30th September, 2021:

Sales	₹ 2,19,30,000
Opening Stock	12,500 units @ ₹ 600 per unit
Administrative Expenses	₹ 5,62,500
Purchases (including freight inward):	
- July 1, 2021	25,000 units @ ₹ 573 per unit
- September 30, 2021	12,500 units @ ₹ 630 per unit
Closing stock- September 30, 2021	16,000 units

You are required to COMPUTE the following by WAM (Weighted Average Method), FIFO method and LIFO method assuming issue/ consumption pattern was even throughout the quarter:

(i) Value of Inventory on 30<sup>th</sup> September, 2021.

(ii) Profit or loss for the quarter ended 30th September, 2021.

**(10 Marks)**

- (b) Equate bank offers 3 products, viz., deposits, Loans and Credit Cards. The bank has selected 4 activities for a detailed budgeting exercise, following activity-based costing methods.

The bank wants to know the product wise total cost per unit for the selected activities, so that prices may be fixed accordingly.

The following information is made available to formulate the budget:

Activity	Present Cost (₹)	Estimation for the budget period
ATM Services:		
(a) Machine Maintenance	5,20,000	All fixed, no change.
(b) Rents	2,60,000	Fully fixed, no change.
(c) Currency Replenishment Cost	1,30,000	Expected to double during budget period.
	9,10,000	
Computer Processing	6,50,000	Half this amount is fixed, and no change is expected. The variable portion is expected to increase to three times the current level.
Issuing Statements	23,40,000	Presently, 3.90 lakh statements are made. In the budget period, 6.5 lakh statements are expected. For every single increase of statement, one rupee is the budgeted increase.
Computer Inquiries	2,60,000	Estimated to increase by 80% during the budget period.

The activity drivers and their budgeted quantifies are given below:

Activity Drivers	Deposits	Loans	Credit Cards
No. of ATM Transactions	1,95,000	---	65,000
No. of Computer Processing Transactions	19,50,000	2,60,000	3,90,000
No. of Statements to be issued	4,55,000	65,000	1,30,000
Telephone Minutes	4,68,000	2,34,000	2,34,000

The bank budgets a volume of 76,180 deposit accounts, 16,900 loan accounts, and 18,200 Credit Card Accounts.

Required:

(i) CALCULATE the budgeted rate for each activity.

(ii) PREPARE the budgeted cost statement activity wise.

(iii) COMPUTE the budgeted product cost per account for each product using (i) and (ii) above.

**(10 Marks)**

4. (a) Arnnav Ltd. operates in beverages industry where it manufactures soft-drink in three sizes of Large (3 litres), Medium (1.5 litres) and Small (600 ml) bottles. The products are processed in batches. The 5,000 litres capacity processing plant consumes electricity of 90 Kilowatts per hour and a batch takes 1 hour 45 minutes to complete. Only symmetric size of products can be processed at a time. The machine set-up takes 15 minutes to get ready for next batch processing. During the set-up, power consumption is only 20%.
- (I) The current price of Large, Medium and Small are ₹ 150, ₹ 90 and ₹ 50 respectively.
- (II) To produce a litre of beverage, 14 litres of raw material-W and 25 ml of Material-C are required which costs ₹ 0.50 and ₹1,000 per litre respectively.
- (III) 20 direct workers are required. The workers are paid ₹ 880 for 8 hours shift of work.
- (IV) The average packing cost per bottle is ₹3
- (V) Power cost is ₹ 7 per Kilowatt -hour (Kwh)
- (VI) Other variable cost is ₹ 30,000 per batch.
- (VII) Fixed cost (Administration and marketing) is ₹ 4,90,00,000.
- (VIII) The holding cost is ₹ 1 per bottle per annum.

The marketing team has surveyed the following demand (bottle) of products:

Large	Medium	Small
3,00,000	7,50,000	20,00,000

Required:

CALCULATE net profit/ loss of the organisation and also COMPUTE Economic Batch Quantity (EBQ). **(10 Marks)**

- (b) Comput Ltd. has capacity to produce 1,00,000 units of a product every month. Its fixed general administration expenses amount to ₹ 7,50,000 and fixed marketing expenses amount to ₹ 12,50,000 per month respectively. The variable distribution cost amounts to ₹ 150 per unit.

Its works cost at varying levels of production is as under:

Level	Works cost per unit (₹)
10%	2,000
20%	1,950
30%	1,900
40%	1,850
50%	1,800
60%	1,750
70%	1,700
80%	1,650
90%	1,600
100%	1,550

It can sell 100% of its output at ₹ 2,500 per unit provided it incurs the following additional expenditure:

- (i) it spends ₹ 5,00,000 on refreshments served every month to its customers;

- (ii) it gives gift items costing ₹ 150 per unit of sale;
- (iii) it sponsors a television programme every week at a cost of ₹ 1,00,00,000 per month.
- (iv) it has lucky draws every month giving the first prize of ₹ 2,50,000; 2nd prize of ₹ 1,25,000, 3rd prize of ₹ 50,000 and three consolation prizes of ₹ 25,000 each to customers buying the product.

However, it can market 30% of its output at ₹ 2,750 per unit without incurring any of the expenses referred to in (i) to (iv) above.

PREPARE a cost sheet for the month showing total cost and profit at 30% and 100% capacity level.

**(10 Marks)**

5. (a) A Manufacturing unit manufactures a product which passes through three distinct Processes - A, B and C. The following data is given:

	Process A	Process B	Process C
Material consumed (in ₹)	36,400	31,500	28,000
Direct wages (in ₹)	56,000	49,000	42,000

- The total Production Overhead of ₹ 2,20,500 was recovered @ 150% of Direct wages.
- 15,000 units at ₹ 28 each were introduced to Process 'A'.
- The output of each process passes to the next process and finally, 12,000 units were transferred to Finished Stock Account from Process 'C'.
- No stock of materials or work in progress was left at the end.

The following additional information is given:

Process	% of wastage to normal input	Value of Scrap per unit (₹)
A	6%	15.40
B	?	28.00
C	5%	14.00

You are required to:

- (i) FIND OUT the percentage of wastage in process 'B', given that the output of Process 'B' is transferred to Process 'C' at ₹ 56 per unit.
  - (ii) PREPARE Process accounts for all the three processes A, B and C. **(10 Marks)**
- (b) M/s Avyukt Automobile Parts has four identical machines in its factory. Cost of each machine is ₹ 5,00,000 with expected scrap value of 10% at the end of its effective life (9 years). The expected annual running hours of machine is expected to run for 2,200 hours. The other details in respect of the machine shop are:
- (I) Factory Rent ₹ 5,000 per month
  - (II) Lighting of Factory ₹ 3,000 per month
  - (III) Operator Wages (Two operators and each operator is in charge of two machines)  
₹10,000 per month (per Operator)
  - (IV) Fixed repairs and maintenance charges per machine ₹ 2,000 per quarter
  - (V) Insurance premium for the machine (Annual) 3% of cost

(VI) Forman's salary (Devoted 1/6<sup>th</sup> of his time to this factory)

₹ 2,500 per month

(VII) Other factory overhead (Annual)

₹40,000

(VIII) Power Consumption per machine per hour

80 units

(IX) Rate of Power

₹ 150 for 100 units

(X) Unproductive Hours lost during repairs

50 per annum

(XI) Unproductive Hours Lost while Job Setting

650 per annum

You are required to COMPUTE a comprehensive machine hour rate assuming power is used during operating time only. **(10 Marks)**

6. Answer **any four** of the following:

(a) BRIEF OUT advantages and disadvantages of Halsey Premium Plan.

(b) STATE the method of costing for the following industries:

(i) Sugar manufacturing

(ii) Bridge Construction

(iii) Advertising

(iv) Car Assembly

(c) STATE the unit of cost for the following service industries:

(i) Electricity Supply service

(ii) Hospital

(iii) Cinema

(iv) Hotels

(d) BRIEF OUT advantages of Integrated Accounts.

(e) BRIEF OUT difference between Fixed and Flexible Budget.

**(4 × 5 =20 Marks)**