Paper – 8: Cost & Management Accounting

Time Allowed: 3 Hours **Full Marks: 100**

Question No 1 is Compulsory. Answers any five Questions from the rest.
Working Notes should form part of the answer.

Question.1

(a) Match the statement in Column I with the most appropriate statement in Column II : **[1×5 =5]**

Column I	Column II
(i) Relevant Cost	**(A)** prepared for different levels of capacity utilization
(ii) Cost Driver	**(B)** allows goal congruence
(iii) Flexible Budget is	**(C)** Purchase Order Processed
(iv) Transfer Price	**(D)** Future Costs affected by decision making
(v) Contract Costing is	**(E)** a method used in Construction Industry

(b) Fill in the blanks: **[1×5 =5]**

(i) The success of the ………… costing is based on mutual belief and understanding.

(ii) A Budget is a statement that is always prepared ………… to a defined period of time.

(iii) ………..is the difference between the actual sales and the break-even sales.

(iv) A …………… is the notional value at which goods and services are transferred between divisions in a decentralized organization.

(v) Activity Based Costing is based on the identification of …..…….

(c) State whether the following statements are TRUE or FALSE: **[1×5 =5]**

(i) Bin card shows the value of a material at any movement of time.

(ii) Labour Turnover is the movement of people out of the organization.

(iii) Standard Costing may not be suitable for small concerns.

(iv) Cost Accounting is a branch of Financial Accounting.

(v) Transfer pricing has significance for the purpose of measurement of divisional performance.

(d) In the following cases, You are required to indicate the correct answer and give workings: **[2x5 =10]**

(i) XYZ Co. Ltd. is having 400 workers at the beginning of the year and 500 workers at the end of the year. During the year 20 workers were discharged and 15 workers left the company. The Labour Turnover rate under 'separation method' is:

A. 22.20%
B. 7.78%
C. 4.00%
D. 14.40%

(ii) A company maintains a margin of safety of 25% on its current sales and earns a profit of ₹30 lakhs per annum. If the company has a p/v ratio of 40%, its current sales amount to
A. ₹200 lakhs
B. ₹300 lakhs
C. ₹325 lakhs
D. None of the above

(iii) The following information relating to a type of Raw material is available:

Annual Demand	3,000 units
Unit price	₹20.00
Ordering cost per order	₹20.00

Storage cost 2% p.a.
Interest rate 8% p.a.
The economic order quantity is
A. 235 units
B. 240 units
C. 245 units
D. 250 units

(iv) In case of joint products, the main objective of accounting of the cost is to apportion the joint costs incurred up to the split off point. For cost apportionment one company has chosen Physical Quantity Method. Three joint products 'A', 'B' and 'C' are produced in the same process. Up to the point of split off the total production of A, B and C is 60,000 kg, out of which 'A' produces 30,000 kg and joint costs are ₹3,60,000. Joint costs allocated to product A is
A. ₹1,20,000
B. ₹60,000
C. ₹1,80,000
D. None of the these

(v) After inviting tenders for supply of raw materials, two quotations are received as follows— Supplier A ₹2·20 per unit, Supplier B ₹2·10 per unit plus ₹2,000 fixed charges irrespective of the units ordered. The order quantity for which the purchase price per unit will be the same—
A. 22,000 units
B. 20,000 units
C. 21,000 units
D. None of the above

Question.2

(a) From the data given below answer the following:
(i) What is the simple average price of the four weeks' receipts of material A?
(ii) What is the weighted average price of the four week' receipts of material B?
(iii) What is the value of the balance of materials, in stock at the close of the fourth week if issues are priced on LIFO basis?

Raw Material Received			Issued	
	A	B	A	B

Week	Kg-	₹	Kg-	₹	Kg-	₹
1st	250	1,000	1,250	1,690	175	1,500
2nd	300	1,260	1,400	1,960	250	1,200
3rd	200	880	750	1,050	300	1,300
4th	250	960	1,600	2,400	300	1,100

Stores Opening Stocks: A – 200 kg. ₹720; B – 2,000 kg. ₹2,900. [2+2+2]

(b) A Company using a detailed system of standard costing finds that the cost of investigation of variances is ₹ 20,000. If after investigation an out of control situation is discovered, the cost of correction is ₹ 30,000. If no investigation is made, the present value of extra cost involved is ₹1,50,000. The probability of the process being in control is 0.82 and the probability of the processes being out of control is 0.18. You are required to advice:

(i) Whether investigation of the variances should be undertaken or not;
(ii) The probability at which it is desirable to institute investigation into variances. [2+4]

(c) Explain the term Opportunity Cost. [3]

Question.3

(a) A company is manufacturing building bricks and fire bricks. Both the products require two processes:

Brick- forming heat –treating

Time requirements for the two bricks are:

	Building Bricks	Fire Bricks
Forming per 100 Bricks	3 hrs	2 hrs
Heat- treatment per 100 Bricks	2 hrs	5 hrs

Total costs of the two departments in one month were:
Forming ₹21,200 heart-treatment ₹48,800
Production during the month was:

Building bricks 1,30,000 Nos. Fire Bricks 70,000 Nos.

Prepare a statement of manufacturing costs for the two varieties of bricks. [5]

(b) Gupta Enterprise is operating at 60% capacity level producing and selling 60,000 units @ ₹50 per unit. Other relevant particulars are as follows :

	Cost per unit
Material	₹20
Conversion Cost (variable)	₹10
Dealer's margin (10% of sales)	₹5
Fixed cost for the period is	₹6,00,000

As there is a stiff competition it is not possible to sell all the products at the existing cost price structure. The following alternative proposals are considered:
(i) Decrease selling price by 20%
(ii) Increase dealer's margin from 10% to 20%

Select the better alternative. Also calculate the sales volume required to maintain the same amount of profit under the alternative which is considered better assuming that volume of sales will not be a limiting factor under such alternative. Also assume that fixed cost will remain constant. [7+3]

Question.4

(a) A manufacturing concern, engaged in mass production produces standardised electric motors in one of its departments. From the following particulars of a job of 50 motors you are required to value the work-in-progress and finished goods.

- Costs incurred as per job card:
  Direct Material ₹75,000 Overheads ₹60,000
  Direct labour ₹20,000
- Selling price per motor: ₹4,500
- Selling and distribution expenses are at 30% of sales value.
- 25 Motors are completed and transferred to finished goods.
- Completion stage of work-in-progress:

Direct Material 100% Direct Labour and Overhead 60%

[$4^1/_2 + 4^1/_2$]

(b) Define Standard Costing. List the general principle of standard costing. [1+5]

Question.5

(a) The following was the expenditure on a contract for ₹12,00,000 commenced in January 2013:

	₹
Materials	2,40,000
Wages	3,28,000
Plant	40,000
Overheads	17,200

Cash received on account of the contract up to 31st December was ₹4,80,000 being 80% of the work certified.

The value of materials in hand was ₹20,000. The plant had undergone 20% depreciation. Prepare Contract Account. [6]

(b) The budgeted cost of a factory specialising in the production of a single product at the optimum capacity of 6,400 units per annum amounts ₹1,76,048 as detailed below:

	₹	₹
Fixed Cost		20,688
Variable Costs:		
Power	1,440	
Repairs etc	1,700	
Miscellaneous	540	
Direct material	49,280	
Direct labour	1,02,4000	1,55,360
		1,76,048

Having regard to possible impact on sales turnover by market trends the company decided to have a flexible budget with a production target of 3,200 and 4,800 units (the actual quantity proposed to be produced being left to a later date before commencement of the budget period). Prepare a flexible budget for production levels at 50% and 75% capacity.

Assume selling price per unit is maintained at ₹40 as at present, indicate the effect on net profit.
Administration, selling and distribution expenses continue at ₹4,500. [$4^1/_2$ + $4^1/_2$]

Question.6

(a) Boraco Ltd. has been offered supplies of special ingredients S at a transfer price of ₹15 per kg by chhotaco Ltd. which is part of the same group of companies. Chhotaco Ltd processes and sells S to customers external to the group at ₹15 per kg. Chhotaco Ltd. bases its transfer price on cost plus 25% profit mark-up. Total cost has been estimated as 75% variable and 25% fixed.

You are required to:

Discuss the Transfer prices at which Chhotaco Ltd. should offer to transfer special ingredient S to Boraco Ltd. in order that group profit maximizing decisions may be taken on financial ground in each of the fallowing situations:-

(i) Chhotaco Ltd. has an external market for all of its production of S at a selling price of ₹15 per kg. Internal transfers to Boraco Ltd. would enable ₹1.50 per kg of variable packing cost to be avoided.

(ii) Conditions are as per (i) but Chhotaco Ltd has production capacity for 3,000 kg of S for which no external market is available.

(iii) Conditions are as per (ii) but Chhotaco Ltd has an alternative use for some of its spare production capacity. This alternative use is equivalent to 2,000 kg of S and would earn a contribution of ₹6,000. [3+2+2]

(b) What are the advantages of Target Costing? [5]

(c) What are the essential features of an effective Wage Plan? [3]

Question.7

(a) Write a note on ABC Analysis. [5]

(b) The finishing shop of a company employs 60 direct workers. Each worker is paid ₹400 as wages per week of 40 hours. When necessary, overtime is worked up to a maximum of 15 hours per week per worker at time rate plus one-half as premium. The current output on an average is 6 units per man hour which may be regarded as standard output. If bonus scheme is introduced, it is expected that the output will increase to 8 units per man hour. The workers will, if necessary, continue to work overtime up to the specified limit although no premium on incentives will be paid.

The company is considering introduction of either Halsey Scheme or Rowan Scheme of Wage Incentive system. The budgeted weekly output is 19,200 units. The selling price is ₹11 per unit and the direct Material Cost is ₹ 8 per unit. The variable overheads amount to ₹ 0.50 per direct labour hour and the fixed overhead is ₹10,000 per week.

Prepare a Statement to show the effect on the Company's weekly Profit of the proposal to introduce (a) Halsey Scheme, and (b) Rowan Scheme. [5+5]

Question. 8 Write short note on any three **[3 x5=15]**

(a) Batch Costing
(b) Activity Based Management
(c) Absorption Costing
(d) Advantages of Market price based transfer price
(e) Inter-Locking Accounts;