

**Paper 8- Cost Accounting**

## Paper-8: Cost Accounting

Full Marks: 100

Time allowed: 3 hours

### Section A

Answer the following questions:

1.(a) Choose the correct answer from the given four alternatives:

[10 × 1 = 10]

(i) Depreciation is a example of-

- (a) Fixed Cost
- (b) Variable Cost
- (c) Semi Variable Cost
- (d) None

(ii) Continuous stock taking is a part of-

- (a) ABC analysis
- (b) Annual stock taking
- (c) Perpetual Inventory
- (d) None of these

(iii) Cost of idle time arising due to non availability of raw material is

- (a) Charged to costing profit and loss A/c
- (b) Charged to factory overheads
- (c) Recovered by inflating the wage rate
- (d) Ignored

(iv) Over time is

- (a) Actual hours being more than normal time
- (b) Actual hours being more than standard time
- (c) Standard hours being more than actual hours
- (d) Actual hours being less than standard time

(v) The allotment of whole items of cost of centres or cost unit is called

- (a) Cost allocation
- (b) Cost apportionment
- (c) Overhead absorption
- (d) None of the above

(vi) In Reconciliations Statements Expenses shown only in financial accounts are.

- (a) Added to financial profit
- (b) Deducted from financial profit
- (c) Ignored
- (d) Added to costing profit

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(vii) Job costing is used in

- (a) Furniture making
- (b) Repair shops
- (c) Printing press
- (d) All of the above

(viii) In a process 8000 units are introduced during a period. 5% of input is normal loss. Closing work in progress 60% complete is 1000 units. 6600 completed units are transferred to next process. Equivalent production for the period is:

- (a) 9000 units
- (b) 7440 units
- (c) 5400 units
- (d) 7200 units

(ix) If sales are ₹ 150,000 and variable cost are ₹ 50,000. Compute P/V ratio.

- (a) 66.66%
- (b) 100%
- (c) 133.33%
- (d) 65.66%

(x) Standard cost of material for a given quantity of output is ₹ 15,000 while the actual cost of material used is ₹ 16,200. The material cost variance is:

- (a) ₹ 1,200 (A)
- (b) ₹ 16,200 (A)
- (c) ₹ 15,000 (F)
- (d) ₹ 31,200 (A)

(b) Match the statement in Column I with the most appropriate statement in Column II:

[1×5 =5]

Column I		Column II	
(i)	Prime Cost	(A)	CAS 19
(ii)	Angle of incidence	(B)	Passenger/ Kilometer
(iii)	Operating Costing	(C)	Direct Cost
(iv)	Joint Cost	(D)	Constant
(v)	Variable cost per unit	(E)	Profitability Rate

(c) State whether the following statements are True' or 'False':

[1×5=5]

- (i) Fixed budget is also known as rigid budget
- (ii) The allocation of joint cost on by-products affects the total profit or loss.
- (iii) Job costing is applied only in small concerns.
- (iv) For decision making, absorption costing is more suitable than marginal costing.
- (v) Overhead and conversion cost are inter-changeable terms.

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(d) Fill in the blanks suitably:

[1x5=5]

- (i) Profit ÷ P/v Ratio = \_\_\_\_
- (ii) Budget is a quantitative and / or a \_\_\_\_ statement.
- (iii) Fixed cost per unit \_\_\_\_ varies with the no. of units.
- (iv) An activity level of 1000 hours cost is ₹10,000 and an activity level for 2000 hours the total cost is ₹16,000. The cost at 3000 hours of level of activity is \_\_\_\_
- (v) \_\_\_\_\_ is must for meaningful inter-firm comparison.

## Section B

Answers any five Questions, working notes should form part of the answer.

2.(a) M Two workmen, Gyani and Jeetu, produce the same product using the same material. Their normal wage rate is also the same. Gyani is paid bonus according to the Halsey System, while Jeetu is paid bonus according to the Rowan System. The time allowed to make the product is 40 hours. Gyani takes 25 hours while Jeetu takes 32 hours to complete the product. The factory overheads are charged @ 125% of direct labour cost. The factory cost for the product for Gyani is ₹8,925 and for Jeetu it is ₹9,456. You are required to:

- (i) find the normal rate of wages;
- (ii) find the cost of materials;
- (iii) Prepare a statement comparing the element wise factory cost of the products as made by the two workmen. [2<sup>1</sup>/<sub>2</sub>+2<sup>1</sup>/<sub>2</sub>+5=10]

(b) From the following particulars given below compute Machine hour rate for a machine.

- a. Cost ₹ 24,000
- b. Scrap value ₹ 4,000
- c. Estimated Working life 40,000 hours
- d. Estimated cost of repairs and maintenance during the whole life ₹2,000
- e. Standard charges of the shop for 4 weekly period ₹ 3,000
- f. Working hours in 4 weekly period 100 hours
- g. No. of machines in the shop each of which is liable for equal charge are 30 machines.
- h. Power used per hour 4 units @ 10p. per unit. [5]

3.(a) How classification of costs is determined under CAS-1 [5]

(b) From the following particulars pass the journal entries in an integral accounting system:

- I. Issued materials ₹3,00,000 of which ₹2,80,000 (standard ₹2,40,000) is direct materials:
- II. Net wages paid ₹70,000 deduction being ₹12,000 (standard ₹75,000)
- III. Gross salaries payable for the period is ₹26,000 (standard ₹25,000). Deductions ₹2,000.
- IV. Sales (Credit) ₹8,00,000.
- V. Discount allowed ₹5,000. [5x2=10]

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4. (a) AB Ltd. is committed to supply 24,000 bearings per annum to CD Ltd. On a steady basis. It is estimated that it costs 10 paise as inventory holding cost per bearing per month and that the set-up cost per run of bearing manufacture is ₹ 324.
- (a) What would be the optimum run size for bearing manufacture?
- (b) What is the minimum inventory holding cost at optimum run size?
- (c) Assuming that the company has a police of manufacturing 6000 bearing per run, how much extra costs would the company be incurring as compared to the optimum run suggested in (a)? [7]

- (b) VIBRANT LTD. a manufacturing Company, produces one main Product A and two by-products M and N.

For the month of May, 2016, following details are available:

Total Cost up to separation point ₹2,20,000.

Product/By-Product	A	M	N
Cost after separation		₹ 35,000	₹ 24,000
No. of units produced	4,000	1,800	3,000
Selling price per unit	₹100	₹40	₹30
Estimated net profit as percentage to sales value		20%	30%
Estimated selling expenses as percentage to sales value	20%	15%	15%

There is no beginning or closing inventories.

Required:

Prepare statement showing:

- (i) Allocation of joint cost; and
- (ii) Product wise and overall profitability of the company for May, 2016. [4+4=8]

- 5.(a) Janata Transport Co. has been given a route 20 km. long for running buses. The company has a fleet of 10 buses each costing ₹ 50,000 and having a life of 5 years without any scrap value.

From the following estimated expenditure and other details calculate the bus fare to be charged from each passenger.

- (i) Insurance charges 3 % p.a.
- (ii) Annual tax for each bus ₹ 1,000
- (iii) Total garage charges ₹1,000
- (iv) Drivers' salary for each bus ₹150 p.m
- (v) conductor's salary for each bus ₹100 p.m
- (vi) Annual repairs to each bus ₹1,000
- (vii) Commission to be shared by the driver and conductor equally: 10% of the takings
- (viii) Cost of stationary ₹500 p.m.
- (ix) Manager's salary ₹2,000 p.m.
- (x) Accountant's salary ₹1,500 p.m.
- (xi) Petrol and oil ₹25 per 100 km

Each bus will make 3 round trips carrying on an average 40 passengers on each trip. The bus will run on an average for 25 days in a month. Assuming 15% profit on takings, calculate, the bus fare to be charged from each passenger. **[8]**

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- (b) The following was the expenditure on a contract for ₹12,00,000 commenced in January 2016:

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

Cash received on account of the contract up to 31<sup>st</sup> 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. [7]

- 6.(a) The following particulars are extracted from the records of a company:

		PER UNIT	
		PRODUCT A	PRODUCT B
Sales	(₹)	100	120
Consumption of material		2 Kg	3 Kg
Material cost	(₹)	10	15
Direct wages cost	(₹)	15	10
Direct expenses	(₹)	5	6
Machine hours used		3 Hrs	2 Hrs
Overhead expenses:			
Fixed	(₹)	5	10
Variable	(₹)	15	20

Direct wages per hour is ₹ 5

- (i) Comment on profitability of each product (both use the same raw material) when :
- 1) Total sales potential in units is limited;
  - 2) Total sales potential in value is limited;
  - 3) Raw material is in short supply;
  - 4) Production capacity (in terms of machine hours) is the limiting factor.
- (ii) Assuming raw material as the key factor, availability of which is 10,000 Kgs. and each product cannot be sold more than 3,500 units find out the product mix which will yield the maximum profit. [6+5 =11]

- (b) ABC Ltd. and MNO Ltd. sell identical products in identical market. Their budgeted income statement for the year 2015-2016 are as follows:

	ABC Ltd. (₹)	MNO Ltd. (₹)
Sales	5,00,000	6,00,000
Less: Variable Cost	(4,00,000)	(1,80,000)
Contribution	1,00,000	4,20,000
Less: Fixed Cost	(20,00)	(2,70,000)
Budgeted Profit	80,000	1,50,000

Calculate:

- (i) BEP for each company;  
 (ii) Sales at which each company will earn a profit of ₹60,000; [2+2]

- 7.(a) AVTAR LTD., operates a System of Standard Costing. The Company manufactures a Chemical Product by mixing three ingredients Chemical A, B and C and processes the same. The Standard Cost data for the product are as follows:

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Chemical	Percentage of total input	Standard Cost per kg. (₹)
A	50%	40
B	30%	60
C	20%	95

Note: Loss during processing is 5% of input and this has no realizable value.

During the month of May, 2016, 10,200 kg. of finished product was obtained from the inputs as per details given below:

Chemical Consumed	Quantity purchased and issued	Actual Cost (₹)
A	5200 kg.	2,34,000
B	3600 kg.	2,19,600
C	1700 kg.	1,58,100

You are required to calculate:

- (i) Material Cost Variance
- (ii) Material Price Variance
- (iii) Material Usage Variance
- (iv) Material Mix Variance
- (v) Material Yield Variance

[5×2=10]

- (b) Prepare a Production Budget for three months ending March 31, 2016 for a factory producing four products, on the basis of the following information. [5]

Type of Product	Estimated Stock on Jan. 1, 2016	Estimated Sales during Jan. To Mar. 2016	Desired closing stock on 31.3.2016
A	2,000	10,000	3,000
B	3,000	15,000	5,000
C	4,000	13,000	3,000
D	3,000	12,000	2,000

8. Write short notes on any three of the following:

[5×3=15]

- (a) Cost Absorption
- (b) Cost Control Vs. Cost Reduction
- (c) Just-in-Time (JIT)
- (d) Responsibility Accounting.