# Paper 8- Cost Accounting

### 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:  $[10 \times 1 = 10]$ (i) Batch Costing is suitable for-A. Sugar Industry **B.** Chemical Industry C. Pharma Industry D. Oil Industry (ii) Which of the following is considered as accounting record? A. Bin Card B. Bill of material C. Store Ledger D. None of these

#### (iii) Idle time is

- A. Time spent by workers in factory
- B. Time spent by workers in office
- C. Time spent by workers off their work
- D. Time spent by workers on their job
- (iv) Time keeping refers to
  - A. Time spent by workers on their job
  - B. Time spent by workers in factory
  - C. Time spent by workers without work
  - D. Time spent by workers on their job
- (v) Directors remuneration and expenses form a part of
  - A. Production overhead
  - B. Administration overhead
  - C. Selling overhead
  - D. Distribution overhead
- (vi) In Reconciliations Statements Expenses shown only in cost accounts are.
  - A. Added to financial profit
  - B. Deducted from financial profit
  - C. Ignored
  - D. Deducted from costing profit

- (vii) The most suitable cost system where the products differ in type of material and work performed is
  - A. Operating Costing
  - B. Job costing
  - C. Process costing
  - D. All of these.

(viii) Equivalent production of 1,000 units, 60% complete in all respects, is :

- A. 1000 units
- B. 1600 units
- C. 600 units
- D. 1060 units

(ix) Contribution is ₹ 300,000 and sales is ₹1,500,000. Compute P/V ratio.

- A. 15%
- B. 20%
- C. 22%
- D. 17.5%
- (x) Standard price of material per kg is ₹ 20, standard usage per unit of production is 5 kg. Actual usage of production 100 units is 520 kgs, all of which was purchase at the rate of ₹ 22 per kg. Material usage variance is
  - A. ₹ 400 (F) B. ₹ 400 (A) C. ₹ 1,040 (F) D. ₹ 1,040 (A)

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

Column I		Column II	
(i)	Royalties	(A)	Total sales less BEP sales
(ii)	Research and Development Cost	(B)	Direct allocation
(iii)	Donations	(C)	Appropriations only in financial accounts
(iv)	Job costing is used in	(D)	Automobile garages
(v)	Margin of Safety	(E)	CAS 18

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

[1x5=5]

- (i) In India, if a worker works for more than 8 hours on any day or for more than 40 hours in a week, he is treated to be engaged in overtime.
- (ii) At breakeven point, contribution available is equal to total fixed cost.
- (iii) Standards costing are more profitability employed in job order industries than in process type industries.
- (iv)Generally, budgets are prepared to coincide with the financial year so that comparison of the actual performance with budgeted estimates would facilitate better interpretation and understanding.
- (v) Weighted average method of pricing issue of materials involves adding all the different prices and dividing by the number of such prices.

(d) Fill in the blanks suitably:

- (i) Transfer of surplus material from one job or work order is recorded in \_\_\_\_\_
- (ii) In a company there were 1200 employee on the rolls at the beginning of a year and 1180 at the end. During the year 120 persons left services and 96 replacements were made. The labour turnover to flux method is \_\_\_\_\_\_%.
- (iii) The difference between practical capacity and the capacity based on sales expectancy is known as \_\_\_\_\_\_.
- (iv) Under integrated accounting system, the accounting entry for payment of wages is to debit \_\_\_\_\_ and to credit cash.
- (v) Standard means a criterion or a yardstick against which actual activity can be compared to determine the \_\_\_\_\_\_ between two.

#### Section **B**

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

2. (a) From the following data for the year ended 31<sup>st</sup> Dec, 2017, calculate the inventory turnover ratio of the two items, and put forward your comments on them.

	Material A Amount ( <b>₹)</b>	Material B Amount (₹)	
Opening stock on 1-1-2017	25,000	15,000	
Purchase during the year 2017	72,000	57,000	
Closing on 31-12-2017	6,000	11,000	

- (b) A worker under the Halsey method of remuneration has a day rate of ₹12 per week of 48 hours, plus a cost of living bonus of 10 p. per hour worked. He is given 8 hours task to perform, which he performs in 6 hours, he is allowed 30% of the time saved as premium bonus. What would be his earnings under Halsey Plan and Rowan Plan. [8]
- 3. (a) The following information relates to the activities of a production department of factory for a certain period.

	Amount (₹)
Material used	56,000
Direct Wages	40,000
Labour hours	12,000
Hours of Machinery-operation	20,000
Overhead Chargeable to the Dept	25,000

On one order carried out in the department during the period the relevant data were:-

Material used (₹)	6,000
Direct Wages (₹)	4,950
Labour hours worked	1,650 Hrs.
Machine Hours	1,200

Calculate the overheads chargeable to the job by four commonly used methods. [7]

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[7]

(b) The following particulars relate to a processing machine treating a typical material. You are required to calculate the machine hour rate.

The cost of the machine	₹1,00,000		
Estimated life	10 years		
Scrap value	₹10,000		
Working time (50 weeks of 44 hrs. each)	2,200 hrs.		
Machine maintenance per annum	200 hrs		
Setting up time estimated @ 5% of total productive time			
Electricity is 16 units per hour @ 10 paise per unit.			
Chemicals required weekly	₹20		
Maintenance cost per year	<b>₹</b> 1,200		

Two attendants control the operations of the machine together with 6 other machines, their combined weekly wages are ₹140. Departmental overhead allocated to this machine per annum ₹ 2,000. [8]

4.(a) The following are the costing records for the year 2017 of a manufacturer:

Production 20,000 units; Cost of Raw Materials ₹ 2,00,000; Labour Cost ₹ 1,20,000; Factory Overheads ₹ 80,000; Office Overheads ₹ 40,000; Selling Expenses ₹10,000, Rate of Profit 25% on the Selling Price.

The manufacturer decided to produce 25,000 units in 2017. It is estimated that the cost of raw materials will increase by 20%, the labour cost will increase by 10%, 50% of the overhead charges are fixed and the other 50% are variable. The selling expenses per unit will be reduced by 20%. The rate of profit will remain the same.

Prepare a Cost Statement for the year 2017 showing the total profit and selling price per unit. [8]

(b) A transistor manufacturer, who commenced his business on 1st June, 2017 supplies you with the following information and asks you to prepare a statement showing the profit per transistor sold. Wages and materials are to be charged at actual cost, works overhead at 75% of wages and office overhead at 30% of works cost. Number of transistors manufactured and sold during the year was 540.

Other particulars:	
Materials per set	₹ 240
Wages per set	₹ 80
Selling price per set	₹ 600

If the actual works expenses were ₹32,160 and office expenses were ₹61,800, prepare a Reconciliation Statement. [7]

5. (a) A work order for 100 units of a commodity has to pass through four different machines of which the machine hour rates are:

Machine P – ₹ 1.25, Machine Q – ₹ 2.50, Machine R – ₹ 3 and Machine S – ₹ 2.25

Following expenses have been incurred on the work order – Materials  $\overline{\mathbf{x}}$  8,000 and Wages  $\overline{\mathbf{x}}$  500.

Machine - P has been engaged for 200 hours. Machine - Q for 160 hours, Machine - R for 240 hours and Machine - S for 132 hours.

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After the work order has been completed, materials worth ₹ 400 are found to be surplus and are returned to stores.

Office overhead used to be 40% of works costs, but on account of all-round rise in the cost of administration, distribution and sale, there has been a 50% rise in the office overhead expenditure.

Moreover, it is known that 10% of production will have to be scrapped as not being upto the specification and the sale proceeds of the scrapped output will be only 5% of the cost of sale.

If the manufacturer wants to make a profit of 20% on the total cost of the work order, find out the selling price of a unit of commodity ready for sale. [8]

(b) A company of builders took to a multi-storied structure for ₹ 40,00,000 estimating the cost to be ₹ 36,80,000. At the end of the year, the company had received ₹ 14,40,000 being 90% of the work certified; work done but not certified was ₹40,000. Following expenditures were incurred.

	•
Materials	4,00,000
Labour	10,00,000
Plant	80,000

Materials costing ₹ 20,000 were damaged. Plant is considered as having depreciated at 25%. Prepare Contract Account and show all the possible figures that can reasonably be credited to Profit and Loss Account. [7]

6. (a) From the following information prepare process account.

Opening stock		Degree of completion
800 Units @ ₹7 per unit	₹ 5,600	Material I - 100%
		Material II - 60%
		Labour and Overheads 40%.
Transfer from Process NO - I		
12,000 units costing	₹16,350	
Transfer to next process	9,700 units	
Normal process loss	10%	
Closing stock	1,800 units	

Degree of Completion: For units scrapped:- Material 100% Labour and Overheads 50%. For closing stock: Material 60%; Labour and overheads 50% Scrap realized Rs.1.00 per unit

Other information: Material ₹10,500; Labour ₹ 20,760; Overheads ₹16,670

[9]

(b) In the course of manufacture of the main product 'P' by products 'A' and 'B' also emerge. The joint expenses of manufacture amount to ₹1,19,550. All the three products are processed further after separation and sold as per details given below:

	Main product By products		oducts
	Р	Α	В
Sales	90,000	60,000	40,000
Cost incurred after separation	6,000	5,000	4,000
Profit as percentage on sales	25	20	15

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Total fixed selling expenses are 10% of total cost of sales which are apportioned to the three products in the ratio of 20: 40: 40.

(i) Prepare a statement showing the apportionment of joint costs to the main product and the two by products.

(ii) If the by-product A is not subjected to further processing and is sold the point of separation for which there is a market, at ₹58,500 without incurring any selling expenses. Would you advise its disposal at this stage. Show the workings. [6]

7. (a) ABC Ltd. furnishes you the following information relating to the half year ended 30th June, 2017.

Fixed expenses	₹ 45,000
Sales value	₹1,50,000
Profit	₹ 30,000

During the second half the year the company has projected a loss of ₹10,000.

Calculate:

(1) The B.E.P and M/S for six months ending 30th June, 2017.

(2) Expected sales volume for the second half of the year assuming that the P/V Ratio and Fixed expenses remain constant in the second half year also. [7]

- (3) The B.E.P and M/S for the whole year for 2017.
- (b) The standard set for material consumption was 100kg. @₹ 2.25 per kg.
  - In a cost period: Opening stock was 100 kg. @ ₹ 2.25 per kg. Purchases made 500 kg. @ ₹ 2.15 per kg. Consumption 110 kg. Calculate: a) Usage b) Price variance 1) When variance is calculated at point of purchase 2) When variance is calculated at point of issue on FIFO basis 3) When variance is calculated at point of issue on LIFO basis [8]

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

[5x3=15]

- (a) Conversion Cost
- (b) Periodical Stock Verification
- (c) Accounting treatment of scrap
- (d) Performance Budgeting.