Paper 8- Cost Accounting

Paper 8 – Cost Accounting

Full Marks: 100 **Time allowed: 3 hours**

Section-A

Section A contains Question Number 1. All parts of this question are compulsory.

1. Answer the following questions

(a) Choose the most appropriate alternative for the following (you may write only the Roman numeral and the alphabet chosen for your answer): [1x10=10]

(i) Labour costs requiring special treatment:

(a) Idle time

(b) Overtime

(c) Fringe benefits

(d) Holiday and vacation pay

(ii) Continuous stock taking is a part of-

(a) ABC analysis

(b) Annual stock taking

(c) Perpetual Inventory

(d) None of these

(iii) In which of the following incentive plan of payment, wages on time basis are not guaranteed?

(a) Halsey plan

(b) Rowan plan

(c) Taylor's differential piece rate system

(d) Gantt's task and bonus system

(iv) Example of Direct Expenses

(a) Rent

(b) Royalty charged on production

(c) Bonus to employee

(d) None of these

(v) Charging to a cost center those overheads that result solely for the existence of that cost center is known as

(a) Allocation

(b) Apportionment

(c) Absorption

(d) Allotment

(vi) Standards deals with the principles and methods of determining depreciation and amortization cost-

(a) CAS 9

(b) CAS 12

(c) CAS 15

(d) CAS 16

(vii) Budgets are shown in _______________ Terms

(a) Qualitative

(b) Quantitative

(c) Materialistic

(d) Both (b) and (c)

(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) In Reconciliations Statements, Incomes shown only in financial accounts are.

(a) Added to financial profit

(b) Deducted from financial profit

(c) Ignored

(d) Deducted from costing profit

(x) Which of the following is not an element of works overhead?

(a) Sales manager's salary

(b) Plant manager's salary

(c) Factory repairman's wages

(d) Product inspector's salary

(b) Match the following : [5×1=5]

	Column I		Column II
(i)	Breakeven point (in Quantity)	A.	Total Earnings = R × $\sqrt{S \times H}$
(ii)	Research and Development Cost	B.	CAS 2
(iii)	Barth variable sharing plan	C.	Fixed Cost/ Contribution per unit
(iv)	Capacity Determination	D.	It relates to net profit to total assets
(v)	Return on total resources	E.	CAS 14

(c) Say True or False for the following question: [5×1=5]

(i) Differential Cost is the change in the cost due to change in activity from one level to another.

(ii) ABC analysis is based on the principle of management by exception.

(iii) Identification of direct expenses shall be based on traceability in an economically feasible manner.

(iv) FIFO methods are followed for evaluation of equivalent production when prices are fluctuating.

(v) A budget manual is the summary of all functional budgets.

(d) Fill in the blanks: [5×1=5]

(i) 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 _________ %.

(ii) ______________ nominee from the regulate like CAG, RBI to the CASB Board.

(iii) In Reconciliations Statements, Incomes shown only in Financial accounts are __________________.

(iv) The method of costing used in undertaking like gas companies, cinema houses, hospitals etc is known as __________________.

(v) Cash budget is a part of ________________ budget.

Section – B

Answer any five questions from question numbers 2 to 8.

Each question carries 15 marks

2. (a) The existing Incentive system of ABC Ltd is as under:

Normal working week : 5 days of 8 hours each plus 3 late shifts of 3 hours each

Day work: ₹ 150 per hour

Late shift : ₹ 200 per hour

Average output per operator for 49 hours week i.e. including

3 late shifts : 125 articles.

In order to increase output and eliminate overtime, it was decided to switch on to a system of payment by results. The following information is obtained:

Time rate (as usual) : ₹ 150 per hour

Basic time allowed for 15 articles : 5 hours

Piece-work rate : Add 30% to basic piece-rate

Premium Bonus : Add 50% to time

Required:

Prepare a statement showing hours worked, weekly earnings, number of articles produced and labour cost per article for one operator under the following systems:

(i) Existing time-rate

(ii) Straight piece-work

(iii) Rowan system

(iv) Halsey premium system

Assume that 140 articles are produced in a 40-hour week under straight piece work, Rowan Premium System, the Halsey Premium System above and worker earns half the time saved under Halsey Premium System. **[8]**

2. (b) There are three production departments and two service departments in a company. The overheads of service departments are charged on percentage basis as under:

Department	Production Departments			Service Departments	
	A	B	C	P	Q
Total Overhead (₹)	9,000	6,000	3,000	702	900
Services provided by P	20%	40%	30%	-	10%
Services provided by Q	40%	20%	20%	20%	-

Required: Apportion the overhead of service departments to the production departments using Simultaneous Equation method. **[7]**

3. (a) List the functions of the Cost Accounting Standard Board **[6]**

3. (b) Given below is the Trading and profit and Loss Account of a company for the year ended 31st March, 2019:

Particulars	**Amount (₹)**	**Particulars**	**Amount (₹)**
To Materials	26,40,000	By Sales (60,000 units)	60,00,000
To wages	16,10,000	By Stock (2,000 units)	1,60,000
To Factory Expenses	9,30,000	Work-in-progress: (₹)	

To Administration Expenses	3,82,400	Materials 64,000	
To Selling Expenses	4,60,000	Wages 36,000	
To Preliminary Expenses written off	50,000	Factory Expenses 20,000	1,20,000
Net Profit	2,25,600	By Dividend Received	18,000
	62,98,000		62,98,000

The company manufactures standard units. In the Cost Accounts:

(i) Factory Expenses have been allocated to production at 25% of prime Cost;

(ii) Administrative Expenses at ₹ 5 per unit produced and

(iii) Selling Expenses at ₹ 6 per unit sold.

Prepare the Costing Profit and Loss Account of the company and reconcile the same with the profit disclosed by the Financial Accounts. **[9]**

4. (a) Component 'Gold' is made entirely in cost centre 100. Material cost is 6 paise per component and each component takes 10 minutes to produce. The machine operator is paid 72 paise per hour, and machine hour rate is ₹ 1.50. The setting up of the machine to produce the component 'Gold' takes 2 hours 20 minutes.

On the basis of this information, prepare a cost sheet showing the production and setting up cost, both in total and per component, assuming that a batch of :

(a) 10 components,

(b) 100 components, and

(c) 1000 components is produced **[7]**

4. (b) The following details are extracted from the costing records of Gold Winner Ltd., an oil mill for the year ended 31st March, 2019. Purchased 2800 tons of copra for ₹ 1,40,000 and other expenses were as under:

	Crushing (₹)	**Refining (₹)**	**Finishing (₹)**
Cost of Labour	12,000	7,000	5,000
Sundry Material	5,000	4,000	3,000
Electric Power	4,000	3,000	1,600
Steam	3,000	2,000	2,500
Repair of Machine	3,000	2,000	500
Cost of Casks	-	-	8,400

Factory Expenses were ₹12,000 to be apportioned on the basis of wages. 2500 tons of crude oil was produced; 2240 tons of oil was refined and finally 2200 tons of oil was finished for delivery. Realized ₹5,000 from sale of sacks; ₹8,000 by sale of 250 tons of copra residue and ₹10,000 by sale of 200 tons of by-products in refining process.

Prepare Process Accounts for the year ending on 31st March, 2019. **[8]**

5. (a) KPN Transport company has been given a license to ply a non air-conditioned bus between Ooty and Coimbatore covering a distance 75 km has been obtained. The Volvo bus will make 4 round trips in a day for 25 days in a month. It has a seating capacity of 30 passengers and on an average 85% occupancy is expected throughout. The purchase price of the bus is ₹12,00,000, it has a life of 10 years with a salvage value of ₹ 20,000 at the end of its life. The details of the operating expenses are as under:

Insurance	₹24,000 per annum
Garage rent	₹ 4,000 per quarter
Road Tax	₹ 6,000 per annum
Repairs	₹ 8,000 per quarter
Administration	₹ 2,000 per month
Driver's salary	₹ 6,000 per month
Conductor's salary	₹ 4,000 per month
Tyres and Tubes	₹ 6,000 per quarter
Diesel	₹ 22 per litre
Oil and Sundries	₹ 30 per 100 km run

The bus consumes a litre of diesel for every 6 km of run. The company requires a profit of 30% on total taking.

You are required to prepare an annual cost sheet showing the cost per passenger kilometer and the one way fare per passenger from Ooty to Coimbatore. **[8]**

5. (b) Panaroma Ltd. Undertook a contract for ₹ 8,00,000 on 1st January, 2019. The company furnishes the following details for the year ended 31st December, 2019:

	(₹)
Material consumed	2,15,000
Direct Expenses	15,000
Wages	50,000
Materials returned to stores	5,000
Materials stolen from site	15,000
Insurance claim admitted	9,000
Works expenses @ 20% on wages	
Office expenses @ 10% on works cost	
Materials in hand on 31.12.2019	25,000
Cash received to the extent of 90% of works certified	4,86,000
Cost of work uncertified	20,000

Plant sent to site costing ₹ 80,000 with a scrap value of ₹ 10,000 and its useful life is 5 years. The plant was used on the contract for 146 days.

Required:

Prepare Contract Account showing therein the cost of materials issued to site and the amount of profit or loss to be transferred to the profit & Loss Account.

[7]

6. (a) The trading results of Gupta Limited for the two years have been:

Year	**Sales (₹)**	**Profit/(Loss)(₹)**
2019	56,00,000	8,00,000
2018	44,00,000	5,00,000

Compute the following:

(i) P/V ratio;

(ii) Fixed costs;

(iii) Break-even sales;

(iv) Margin of Safety at a profit of ₹ 4,80,000;

(v) The sales required to earn a profit of ₹ 6,00,000 **[8]**

6. (b) A ball manufacturer marks an average net profit of ₹ 5.00 per piece on a selling price of ₹ 30.00 by producing and selling 5,000 pieces or 50% of the capacity. His cost of sales is

	Amount(₹)
Direct material	11.25
Direct wages	6.75
Works overheads (50% fixed)	5.50
Sales overheads (25% variable)	1.50

During the current year, he intends to produce the same number but anticipates that fixed charges will go up by 8% which direct labour price and material will increase by 10% and 8% respectively but he has no option of increasing the selling price. Under this situation, he obtains an offer for further 25% of the capacity. What minimum price you will recommend for acceptance to ensure the manufacturer an overall profit of ₹ 25,000.

[7]

7. (a) The standard material cost for 100kg of chemical D is made up:

Chemical A 30kg @ ₹ 4 per kg

Chemical B 40 kg @ ₹ 5 per kg

Chemical C 80 kg @ ₹ 6 per kg

In a batch 500 kg of chemical D were produced from a mix of

Chemical A 140kg @ ₹ 588

Chemical B 220kg @ ₹ 1,056

Chemical C 440kg @ ₹ 2,860

How do you yield mix and price of factors contribute to the variance in the actual cost per 100kg of chemical D over the standard cost? **[8]**

7. (b) Prepare a Cash Budget for the three months ending 30th June, 2019 from the information given below:

(a)

Month	Sales (₹)	Materials (₹)	Wages (₹)	Overheads (₹)
February	15,000	9,800	3,200	1,900
March	16,000	9,200	3,200	2,100
April	17,000	9,500	3,400	2,200
May	18,000	10,500	3,800	2,400
June	19,000	10,600	4,200	2,500

(b) Credit terms are:-

Sales/Debtor – 10% sales are on cash, 50% of the credit sales are collected next month and the balance in the following month.

Creditors:

Materials	2 months
Wages	1 month
Overheads	½ month

(c) Cash and bank balance on 1st April, 2019 is expected to be ₹ 15,000

(d) Other relevant information is:

(i) Plant and machinery will be installed in February 2019 at a cost of ₹ 1,00,000. The monthly installments of ₹ 2,000 is payable from April onwards.

(ii) Dividend @ 5% on Preference share capital of ₹ 1,00,000 will be paid on 1st June.

(iii) Advance to be received for sale of vehicles ₹ 11,000 in June.

(iv) Dividends from investments amounting to ₹ 5,000 are expected to receive in June. **[7]**

8. Short note: (any three) **[5×3=15]**

(a) Cost Unit

(b) Difference between Financial Accounting and Cost Accounting

(c) Economic Order Quantity: (EOQ)

(d) Advantages of Marginal Costing (any five)