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
Debenture interest	Inventory management
JIT system	Cost Control
Standard costing	Does not involve any cash out flow
Notional cost	Semi-variable cost
Telephone charges	Item of reconciliation

(b) Fill in the blanks: **[1×5 =5]**

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

(ii) MRP is a production planning system that starts with……..

(iii) Any Transfer Pricing system has to ensure that the allocation of resources is done in such a manner so as to promote……of the organization.

(iv) Under ABC System, the aggregate of closely related tasks is called ……

(v) The cost of abnormal waste should be excluded from the total cost and charged to ……

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

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

(ii) The flux rate method of labour turnover considers employees replaced.

(iii) Production cost efficiency alone is no guarantee of profit.

(iv) TQM stresses on zero defects and doing it right first time.

(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) The annual carrying cost of material 'A' is ₹7.2 per unit and its total carrying cost is ₹18,000 per annum. Calculate the Economic Order Quantity for material 'A'. If there is no safety stock of material A.

A. 4,000 unit
B. 5,000 units
C. 5,500 units
D. 6,000 units

(ii) In a factory repairs and maintenance expenses were ₹1,50,000 at 60% capacity level out of these 40% was fixed. Calculate the repairs and maintenance expenses for the capacity level of 80%.

A. ₹1,80,000
B. ₹1,50,000
C. ₹90,000
D. ₹60,000

(iii) SHAAN LTD. earned a profit of ₹3,00,000 during the year 2014-15. If the marginal cost and selling price of a product are ₹80 and ₹100 per unit respectively, find out the amount of 'Margin of Safety'.

A. ₹3,00,000
B. ₹6,00,000
C. ₹15,00,000
D. ₹18,00,000

(iv) Using Taylor's differential piece rate system, calculate the earnings of 'X' from the following information:

Standard time per piece	= 12 minutes
Normal rate per hour (in a 8 hours day)	= ₹30
'X' produced	= 37 units

A. ₹184.26
B. ₹199.20
C. ₹92.50
D. ₹90.50

(v) A factory transferred out 8,800 completed units during November' 2014. Opening stock was 400 units 75% completed; closing stock was 800 units 50% completed. Assuming FIFO method, estimate the equivalent production in November 2014.

A. 8,700 units
B. 8,800 units
C. 8,900 units
D. 9,000 units

Question.2

(a) Construction Company undertook a contract at an estimated price ₹108 lacks, which includes a budgeted profit of ₹18 lacks. The relevant data for the year ended 31.3.2015 are as under:

	(₹ 000's)
Materials issued to site	5,000
Direct wages paid	3,810
Plant hired	600
Site office costs	370
Materials returned from site	100
Direct expenses	500
Work certified	10,000
Progress payment received	7,200

A special plant was purchased specifically for this contract at ₹10,00,000 and after use on this contract till the end of 31.03.2015, it was valued at ₹7,00,000. The cost of materials at site at the end of the year was estimated at ₹18,00,000. Direct wages accrued as on 31.03.2015 was ₹1,00,0000.

Prepare the Contract Account for the year ended 31st March, 2015 and compute the profit to be taken to the Profit & Loss account. [9]

(b) Discuss the treatment of :—

- "Interest on Borrowing for Working Capital"
- "Cost of Containers Relating to Materials Purchased" [3+3=6]

Question.3

(a) The Managing Director of All Found Limited is very much perturbed to see that labour turnover is increasing every year. Before taking an appropriate action, he desires to know the profit foregone on account of labour turnover. You are required to calculate the profit foregone on account of labour turnover from the following:

All Found Ltd.

Income Statement for the year ended 31-12-2014

Particulars	₹	₹
Sales		2,00,000
Variable Cost:		
Material	50,000	
Direct Labour	40,000	
Variable Overhead	40,000	1,30,000
Contribution		70,000
Less: Fixed Overhead		20,000
Profit before tax		50,000

The direct labour hours worked in the concern during the period were 20,300 of which 500 hours pertained to the new workers on training. Only 40% of the trainees' time was productive. As replacement for the worker left was delayed for some time, 600 productive hours were lost.

The direct costs incurred by the Company as a consequence of labour separation and replacement were as follows:

Separation costs – ₹ 2,000; Selection costs – ₹ 3,000 and Training costs – ₹ 5,000. [8]

(b) The following are the maintenance costs incurred in a machine shop for six months with corresponding machine hours:

Months	Machine Hours	Maintenance Costs (₹)
January	2,000	300
February	2,200	320
March	1,700	270
April	2,400	340
May	1,800	280
June	1,900	290
Total	12,000	1,800

Analyse the maintenance cost, which is semi-variable, into fixed and variable element. [7]

Question.4

(a) "If the products are truly joint products, the cost of process can be applied to these products:

I. On the basis of the weight or other physical quantity of each product.

II. In respect of the marginal cost of the process on the basis of physical quantities and in respect of the fixed costs of the process on the basis of the contribution made by the various products.

III. On the basis of the selling values of the different products."

Using the following figures in respect of the joint production of A and B for a month, show the apportionment of joint costs and profits made, on the above three bases.

Total Cost

Direct Materials	₹26,000
Direct Labour	10,000
Variable Overhead	8,000
Fixed Overhead	22,000

Sales A – 100 tonnes @ ₹600 per tone

B – 120 tonnes @ ₹200 per tone [4+4+3]

(b) State the principle reasons which give rise to variances between actual and standard in standard costing. [4]

Question.5

(a) The XYZ Company has the following budget for the year ended 2014-15:

Sales (1,00,000 units @ ₹20)	₹20,00,000
Variable cost	10,00,000
Contribution	10,00,000
Fixed Cost	4,00,000
Net Profit	6,00,000

From the above set of information find out:

(I) The adjusted profits for 2014-15 if the following two sets of changes are introduced and also suggest which plan should be implemented.

Plan A	%	Plan B	%
Increase in price	20	Decrease in price	20
Decrease in volume	25	Increase in volume	25
Increase in variable cost	10	Decrease in variable cost	10
Increase in fixed cost	5	Decrease in fixed cost	5

(II) The P/V ratio and break-even point under the two plans referred above. [5+5]

(b) A machinery was purchased from a manufacturer who claimed that his machine could produce 142.35 tonnes in a year consisting of 365 days. Holidays, breakdown, etc, were normally allowed in the factory for 65 days. Sales were expected to be 97.5 tonnes during the year and the plant actually produced 98.28 tonnes during the year.

You are required to state the following figures: Rated Capacity; Practical Capacity Normal Capacity; Actual Capacity. [1+2+1+1=5]

Question.6

(a) From the following, prepare variance analysis of a particular department for a month:

Variables overhead items

Variable overhead items	Actual (₹)
Materials handling	8,325
Idle time	850
Rework	825
Overtime premium	250
Supplies	4,000
	14,250

Fixed overhead items	Actual (₹)
Supervision	1,700
Depreciation Plant	2,000
Depreciation Equipment	5,000
Rates	1,150
Insurance	350
	10,200

Normal capacity 10,000 standard hours, budgeted rate ₹1.70 standard hour for variable overhead and ₹ 1.00 per standard hour for fixed overhead. Actual level: 8,000 standard hours. [4+6]

(b) Explain Blanket (Single) Overhead Rate. [5]

Question.7

(a) Two fitters, a labourer and a boy undertake a job on piece rate basis for ₹1,290. The time spent by each of them is 220 ordinary working hours. The rates of pay on time-rate basis are ₹ 1.50 per hour for each of the two fitters, ₹1 per hour for the labourer and ₹ 0.50 per hour for the boy. Calculate:

(I) The amount of piece-work premium and the share of each worker, when the piece-work premium is divided proportionately to the wages paid.

(II) The selling price of the above job on the basis of the following additional data:

Cost of Direct Material ₹ 2010, Works overhear at 20% of prime cost, Selling Overhead at 15% of Works Cost and Profit at 25% on Cost of sales. [5+5]

(b) In a manufacturing unit, overhead was recovered at a predetermined rate of ₹ 25 per man-day. The total factory overhead incurred and the man-days actually worked were ₹3,63,12,500 and 13,12,500 respectively. Out of the 40,000 units produced during a period 30,000 units were sold. There were also 30,000 uncompleted units which may be reckoned at 66.67% complete.

On analyzing the reasons, it was found that 40% of the unabsorbed overheads were due to defective planning and the rest were attributable to increase overhead costs.

How would unabsorbed overhead be treated in Cost Account? [5]

Question.8 Write short note on any three [5x3=15]

(a) Capacity Costs and Relevant Cost
(b) JIT (Just In Time)
(c) Inter-process Profits:
(d) Cost Ledger (maintained in a Costing Department)
(e) 'Cost centre' and 'Cost unit'.