

Seat No.: _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA – SEMESTER 02– • EXAMINATION – WINTER 2015**Subject Code: 2820001****Date: 30/12/2015****Subject Name: COST AND MANAGEMENT ACCOUNTING (CMA)****Time: 02.30 PM TO 05.30 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1 (a) From the four alternative answers given against each of the following cases, indicate the correct answer: (just state A, B, C or D) **06**

1. Increase in total variable cost is due to:
A. Increase in production
B. Increase in fixed cost
C. Increase in sales
D. None of the above
2. Cycle manufacturing organization uses the Costing Method:
A. Unit Costing
B. Batch Costing
C. Multiple Costing
D. Job Costing
3. Director's remuneration and expenses form a part of:
A. Production overhead
B. Administration overhead
C. Selling overhead
D. Distribution overhead
4. The costing system applicable to oil refining industry is:
A. Process costing
B. Unit costing
C. Joint products & by products
D. Job costing
5. For shoe manufacturer, the most suitable cost system is:
A. Job costing
B. Contract costing
C. Batch costing
D. None of the above
6. Service costing is not used in one of the following:
A. Electricity
B. Transport
C. Hospitals
D. Electronics

Q.1 (b) Explain the following terms with practical example: **04**
i) Cost Unit
ii) Cost Reduction
iii) Marginal Cost
iv) Margin of Safety

Q.1 (c) Discuss in brief advantages and limitations of marginal costing. **04**

Q.2 (a) Explain Normal Loss, Abnormal Loss and Abnormal Gain with an example under process costing. **07**

Q.2 (b) Ruchit Manufacturing Company produces two products, furnishes the following data for the year 2011: **07**

Products	Annual Output Units	Total Machine Hours	Total No. of purchase orders	Total no. of set-ups
A	5,000	20,000	160	20
B	60,000	1,20,000	384	44

The annual overheads are as under:

Machine related activity costs	Rs. 5,50,000
Set-up related costs	8,20,000
Purchase related costs	6,18,000

You are required to calculate the production overhead rate for absorption of overheads per unit under:

- Traditional approach, using machine hour rate to absorb overheads
- Activity based costing approach

OR

Q.2 (b) Following particulars have been extracted from Rohan Ltd. for the year 2012:

07

	Rs.
Cost of Materials consumed	6,00,000
Wages	5,00,000
Factory Overheads	3,00,000
Administration charges	3,36,000
Selling charges	2,24,000
Distribution charges	1,40,000
Profit	4,20,000

A work order has to be executed in 2013 and the estimated expenses are:

Materials Rs. 16,000 Wages Rs. 10,000

Assuming that in 2013 the rate of factory overheads has gone up by 20%, distribution charges have gone down by 10% and Selling and administration charges have each gone up by 15% at what price should the ordered product be sold so as to earn the same rate of profit as in 2012?

Factory overheads are based on wages and Administration, Selling and Distribution overheads on factory cost.

Q.3 (a) Discuss in brief features of operating costing.

07

Q.3 (b) In the course of manufacture of the main product 'P', by products 'A' and 'B' also emerge. The joint expenses of manufacture amounted to Rs. 1,19,550/-. All the three products are processed further after separation and sold as per details given below:

07

	Main Product 'P'	By Products	
		'A'	'B'
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%

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

Required:

- Prepare a statement showing the apportionment of joint costs to the main product and the two by-products.
- If the by-product 'A' is not subjected to further processing and is sold at the point of separation for which there is a market, at Rs. 58,500/- without incurring any selling and administration expenses, would you advise its disposal at this stage?

OR

Q.3 (a) What is Zero Base Budgeting? Discuss its advantages and disadvantages?

07

Q.3 (b) From the following data calculate the cost per kilometer of a vehicle of Karan

07

Transport Co.	Rs.
Value of vehicle	15,000
Road license for the year	500
Insurance charges per year	100
Garage rent per year	600
Driver's wages per month	200
Cost of Petrol per litre	0.80

Kilometers per litre	Rs. 8
Charges for tyre and maintenance per kilometer	0.20
Estimated life	1,50,000 Kilometers
Estimated annual running	6,000 Kilometers

- Q.4 (a)** What are the various advantages and disadvantages of budgeting? **07**
- Q.4 (b)** Prepare a flexible budget from the following data: **07**

Capacity	50%
Volume	10,000 units
Selling price per unit Rs.	200
Material cost Rs.	100
Labour cost Rs.	30
Factory overheads Rs.	30 (40% fixed)
Adm. o/h Rs.	20 (50% variable)

At 60% working, material cost per unit increased by 2% and selling price per unit falls by 2%.

At 80% working, material cost per unit increased by 5% and selling price per unit falls by 5%.

Estimate profit at 60% and 80% working and comment.

OR

- Q.4 (a)** What is Standard costing? Discuss in brief advantages and limitations of Standard Costing. **07**

- Q.4 (b)** Modern Toys Ltd. had budgeted the following sales for a month: **07**

Toy A 900 units @ Rs. 50 per unit
Toy B 600 units @ Rs. 100 per unit
Toy C 1,500 units @ Rs. 75 per unit

As against this the actual sales were:

Toy A 1,000 units @ Rs. 55 per unit
Toy B 700 units @ Rs. 95 per unit
Toy C 1,100 units @ Rs. 78 per unit

The standard cost per unit of A, B, C were Rs. 45/-, Rs. 85/- & Rs. 65/- respectively whereas actual costs per unit were Rs. 50/-, Rs. 80/- & Rs. 70/- respectively.

Compute all possible sales variances based on profit.

- Q.5** A practicing Chartered Accountant now spends Rs. 0.90 per kilometer on taxi fares for his client's work. He is considering two other alternatives, the purchase of a new small car or a bigger car. The estimated cost figures are: **14**

Items	New small car Rs.	Old bigger car Rs.
Purchase price	35,000	20,000
Sale price, after 5 years	19,000	12,000
Repairs and servicing per annum	1,000	1,200
Taxes and Insurance, per annum	1,700	700
Petrol consumption, per litre	10 km	7 km
Petrol price, per litre	3.50	3.50

He estimates that he does 10,000 km. annually. Which of the three alternatives will be cheaper? If his practice expands and he has to do 19,000 km. per annum, what should be his decision? At how many km. per annum will the cost of the two cars break even? Recommend the car option suitable for different usage.

Ignore interest and income tax.

OR

Q.5 (a) Mr. X has Rs. 2,00,000/- investment in his business firm. He wants a 15 per cent return on his money. From an analysis of recent cost figures, he finds that his variable cost of operating is 60 per cent of sales and his fixed costs are Rs. 80,000/- per year. Show computations to answer the following questions: **07**

- (i) What sales volume must be obtained to break-even?
- (ii) What sales volume must be obtained to get 15 per cent return on investment?
- (iii) Mr. X estimates that even if he closes the doors of his business, he would incur Rs. 25,000/- as expenses per year. At what sales he would be better off by locking his business up?

(b) Manthan Corporation manufactures and sells three products to the automobile industry. All the products must pass through a machining process, the capacity of which is limited to 20,000 hours per annum, both by equipment design and government regulation. **07**

The following additional information is available:

	Product X	Product Y	Product Z
Selling price per unit	1,900	2,400	4,000
Variable cost per unit	700	1,200	2,800
Machining requirement hours per unit	3	2	1
Maximum possible sales units	10,000	2,000	1,000

Required:

A statement showing the best possible production mix which would provide the maximum profit for Manthan Corporation together with supporting workings.
