D 70853 (Pages : 3) Name..............................

Reg. No..............................

THIRD SEMESTER M.B.A. DEGREE EXAMINATION, DECEMBER 2014

BUS 3C 19—COST AND QUALITY MANAGEMENT

(2013 Admissions)

Time : Three Hours Maximum : 36 Weightage

Answer **all** *the sections.*

Section A

Answer **all** *the questions.*
Each question carries 1 *weightage.*

1. What are the elements of cost ?
2. Define marginal costing.
3. What is budget centre ?
4. What is investment centre ?
5. Distinguish costing techniques and costing methods.
6. What is unfavourable variance ?

($6 \times 1 = 6$ weightage)

Section B

Answer any **six** *questions.*
Each question carries 3 *weightage.*

7. Explain the concept and tools of six Sigma.
8. How to implement TQM ? Explain.
9. Explain the behavioural classification of overheads with examples.
10. Explain the methods of transfer pricing.
11. The following data relates to a company :—

    Plant capacity : 400000 units per annum

    Present utilisation : 40%

    Actual for the year were :

    Selling price Rs. 50 per unit

    Material cost Rs. 20 per unit

    Variable manufacturing cost Rs. 15 per unit

    Fixed cost Rs. 27 lakh

Turn over

In order to improve capacity utilisation the following proposals are being considered :

- Reducing selling price by 10%
- Spending additionally Rs. 3 lakh on sales promotion.

How many units should be made and sold in order to earn a profit of Rs. 25 lakh per year.

12. Find out : (i) P/V ratio (ii) Break-Even-Point (iv) Profit when sales are Rs. 1,00,000 (v) Sales required to earn a profit of Rs. 20,000 :

Period		*Sales*	*Profit*
		Rs.	Rs.
I	...	60,000	4,500
II	...	70,000	6,500

13. ABC Ltd. produces and single product. Sales budget for the calendar year 2013 for each quarter is as follows :

Quarter		*No. of units to be sold*
I	...	12000
II	...	15000
III	...	16500
IV	...	18000

The year 2013 expected to open with an inventory of 4000 units of finished products and close with an inventory of 6500 units. Production is customarily scheduled to provide for 2/3 of the current quarters demand plus 1/3 of the following quarters demand. Thus production anticipates sales volume by about one month. The standard cost details for one unit of product is as follows :

Direct materials 10 kg at 50 paise per kg

Direct labour 1 hour 30 minutes at Rs. 4.00 per hour

Variable overheads 1 hour 30 minutes at Re. 1.00 per hour

Fixed overheads 1 hour 30 minutes at Rs. 2.00 per hour based on the budgeted production volume of 90000 direct labour hour for the year.

Prepare production budget for the year 2013 by quarters showing the number of units to be produced and determine in which quarter of the year the company is expected to break-even.

14. The total overhead expenses of a factory are Rs. 4,46,380. Taking into account, the normal working of the factory, overhead was recovered in production at Rs. 1.25 per hour. The actual hours worked were 2,93,104. How would you proceed to close the books of accounts, assuming that besides 7,800 units produced of which 7,000 were sold, there were 200 equivalent units in work in progress. On investigation, it was found that 50% of the unabsorbed overhead was on account of increase in the cost of indirect materials and indirect labour and the remaining 50% was due to factory inefficiency. Also give the profit implication of the method suggested.

($6 \times 3 = 18$ weightage)

Section C

Answer any **two** *questions.*
Each question carries 6 weightage.

15. The following extracts of costing information relates to commodity A for that half year ending 31st March, 2014.

		Rs.
Purchase of raw materials	...	1,20,000
Works overheads	...	48,000
Direct wages	...	1,00,000
Carriage on Purchases	...	1,440
Stock (1st October, 2013) :		
Raw Materials	...	20,000
Finished products (1,000 tons)	...	16,000
Stock (31st March, 2014) :		
Raw Materials	...	22,240
Finished products (2,000 tons)	...	32,000
Work-in-progress		
(1st October, 2013) :	...	4,800
Work-in-progress		
(31st March, 2014) :	...	16,000
Sales Finished Products	...	3,00,000

Selling and distribution overheads are 1 per ton sold. 16,000 tons of commodities were produced during the period. You are to ascertain :

(i) Cost of raw materials used ;

(ii) Cost of output for the period ;

(iii) Cost of sales ;

(iv) Net Profit for the period ; and

(v) Net Profit per ton of the commodity.

16. The standard material cost for 100 kg of Chemical D is made up of : Chemical A - 30 kg at Rs. 4. per kg. ; Chemical B – 40 kg. at Rs. 5 per kg. ; Chemical C – 80 kg. at Rs. 6 per kg. In a batch, 500 kg of Chemical D were produced from a mix of Chemical A – 140 kg at a cost of Rs. 588 ; Chemical B 220 kg at a cost of Rs. 1056 ; Chemical C – 440 kg at a cost of Rs. 860. How do the yield, mix and the price factor contribute to the variance in the actual per 100 kg. Of chemical D over the standard cost ?

17. Explain the objectives and evolution of quality management.

(2 × 6 = 12 weightage)