# GUJARAT TECHNOLOGICAL UNIVERSITY <br> MBA (Integrated) - SEMESTER - 3 • EXAMINATION - SUMMER - 2019 

Subject Code: 2537101<br>Subject Name: Cost Accounting<br>Time: 02:30 PM To 05:30 PM Instructions:

Date:13/05/2019

Total Marks: 70

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


#### Abstract

Q. 1 (a) The accounts of ABC Ltd. Shows the following information for the year 2012.

Materials Rs.3,50,000; Labour Rs.2,70,000; Factory Overheads Rs.81,000 and Administrative Overheads Rs.56,080.

What price should the company quote for a refrigerator? It is estimated that Rs.2,000 in material and Rs. 1400 in labour will be required for one refrigerator. Absorb factory overheads on the basis of labour and administration overheads on the basis of works cost. A profit of $15 \%$ on selling price is required.


(b) Explain the various classification of the cost with respect to the following:
a) Based on Time
b) Based on Behaviour
c) Based on Controllability
d) Based on Expiry
e) Based on Nature
Q. 2 (a) Explain the techniques of Inventory Control System.
(b) Discuss any three methods of Labour Remuneration.

## OR

(b) You have been given a permit to run a bus on a route 20 kms . Long. The bus cost you Rs. 90,000. It has to be insured @ $3 \%$ p.a. and the annual tax will be Rs. 1,000. Garage rent is Rs. 100 p.m. Annual repairs will be Rs. 1000 and the bus is likely to last for 5 years at the end of which the scrap value is likely to be Rs. 6,000 . The driver's salary will be Rs. 250 p.m. and the conductor's Rs. 200 and $10 \%$ of the takings as commission (to be shared equally by both). Stationery will cost Rs. $50 \mathrm{p} . \mathrm{m}$. The manager cum accountant's salary will be Rs. 450 p.m. Diesel and oil be Rs. 820 per hundred kms. The bus will make 3 round trips for carrying on the average 40 passengers on each trip. The bus will work on the average 25 days in a month. Assuming $15 \%$ profit on takings, calculate the bus fare to be charged from each passenger for 50 passenger kms.
Q. 3 (a) Three workers $\mathrm{X}, \mathrm{Y}$ and Z work in a factory. The following particulars are provided for your information:

| Normal Rate per hour | Re. 0.40 |
| :--- | :--- |
| Piece-Rate (Std. 2 units per hour) | Re. 0.30 per unit |

In a 40-hour week, the production of the workers is as follows:
X - 50 UNITS, Y-80 UNITS, Z - 120 UNITS
(a) Taylor differential piece-rate system
(b) Merrick Differential piece-rate system
(c) Gantt's task bonus system.
(b) Explain the Methods of Inventory Valuation.

OR
Q. 3 (a) A factory produces uniform type of articles and has a capacity of 3,000 units per week. The following information shows the different elements of cost for 3 consecutive weeks when the output has changed from week to week.

| Units Produced | Direct Material | Direct Labour | Semi-Variable |
| :---: | :---: | :---: | :---: |
| 800 | 3,200 | 1,200 | 5,600 |
| 1000 | 4,000 | 1,500 | 6,400 |
| 1600 | 6,400 | 2,400 | 8,800 |

The factory has received an order for 2,400 units. Find out the price at which the factory should quote each unit to earn a profit of $25 \%$.
(b) A company has three production departments and two service departments, and for a period the departmental distribution summary has the following totals:

Production Departments: P1-Rs.800; P2-Rs.700; and P3-Rs. 500
Service Departments: S1-Rs. 234 and S2-Rs. 300
The expenses of the service departments are charged out on a percentage basis as follows:

| Particulars | P1 | P2 | P3 | S1 | S2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Service Department S1 | $20 \%$ | $40 \%$ | $30 \%$ | - | $10 \%$ |
| Service Department S2 | $40 \%$ | $20 \%$ | $20 \%$ | $20 \%$ | - |

Prepare a statement showing the apportionment of two service departments' expenses to Production Departments by Simultaneous Equation Method and Repeated Distribution Method.
Q. 4 (a) In respect of a factory the following figures have been obtained for the year 2017:

Cost of material Rs.6,00,000; Direct wages Rs.5,00,000; Factory overheads Rs.3,00,000; Administrative overheads Rs.3,36,000; Selling overheads Rs.2,24,000; Distribution overheads Rs.1,40,000 and profit Rs.4,20,000.

A work order has been executed in 2018 and the following expenses have been incurred:

Materials Rs.8,000 and wages Rs.5,000.
Assuming that in 2018 the rate of factory overheads has increased by $20 \%$, distribution overheads have gone down by $10 \%$ and selling and administration overheads have each gone up by $12.5 \%$, at what price should the product be sold so as to earn the same rate of profit on the selling price as in 2017? Factory overhead is based on direct wages while all other overheads are based on factory cost.
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(b) Explain the various objectives of Cost Accounting.
Q. 4 (a) A contractor commenced a contract on 1-7-2011. The costing information reveals the following as on 31-3-2012.

| Particulars | Amount (Rs) |
| :--- | :--- |
| Material sent to site | $7,74,300$ |
| Labour Paid | $10,79,000$ |
| Labour outstanding as on 31-3-2012 | $1,02,500$ |
| Salary to engineer | 20,500 per month |
| Cost of plant sent to the site (1-7-2011) | $7,71,000$ |
| Salary to Supervisor (3/4 ${ }^{\text {th }}$ devoted to the contract) | 9000 per month |
| Administration and other expenses | $4,60,600$ |
| Pre-paid administration expenses | 10,000 |
| Material in hand at site as on 31-3-2012 | 75,800 |

Plant used for the contract has an estimated life of 7 years with residual value at the end of life Rs.50,000. Contract price was Rs.45,00,000. On 31-3-2012 two third of the contract was completed. The architect issued certificate covering $50 \%$ of the contract price and the contract has been paid Rs. $20,00,000$ on account. Depreciation on the plant is charged on Straight Line Basis. The cost of uncertified work is Rs.6,59,900.

Prepare Contract Account.
(b) Explain the different methods of costing.
Q. 5 (a) Explain Job and Contract Costing. Differentiate between Job and Contract Costing.
(b) Jay Ambe Catering Services engaged in providing catering services in social events. Mrs. Annapurna, the manager of the firm has received an order to provide a service in a wedding. Estimated expenses for this wedding event are as under:

| Estimated number of dishes | 1,500 |
| :--- | :--- |
| Wages to chefs [two chefs] | Rs. 1,200 each |
| Wages to waiters [20 waiters] | Rs. 300 each |
| Wages to cleaners [10 cleaners] | Rs. 150 each |
| Uniform allowance to chefs and waiters | Rs. 50 each |
| Transportation allowance to chefs, waiters and cleaners | Rs. 100 each |
| Flour and Maida [500 kg] Cost | Rs. 18 per kg |
| Rice, dal and other material | Rs. 8,000 |
| Ghee and oil cost | Rs. 12,000 |
| Vegetables | Rs. 25,000 |
| Spices | Rs. 12,000 |
| Depreciation of utensils | Rs. 5,000 |
| Disposable glass and dishes | Rs. 10,000 |

Transportation charywgw.FirstRanker.com

| LPG cylinder and other fuel charges | Rs.5,000 |
| :--- | :--- |
| Sugar | Rs.5,600 |
| Milk and milk products | Rs.6,000 |
| Sweets | Rs. 15,000 |
| Electricity | Rs.1,200 |
| Misc. Expenses | Rs.10,000 |

Jay Ambe wants to decide the rate of dish in such a way so that the firm can earn $30 \%$ profit on cost. You are required to find out rate per dish.

## OR

Q. 5 (a) From the following particulars of a machine floor shop, calculate the machine hour rate:
(i) Cost of the machine
45,000
(ii) Cost of installation 5,000
(iii) Scrap value after 10 years

5,000
(iv) Rates and rent for the shop (Quarter)1,500
(v) Shop supervisor salary (Quarter) ..... 15,000
(vi) Estimated repairs (per annum) ..... 500
(vii) Insurance premium for machine (per annum) ..... 300
(viii) General Lighting (per month) ..... 500

Power expenses 2 units per hour @ Rs. 375 per 1,000 units. The estimated working hours per annum is 5,000 . The machine occupies $1 / 4$ of the total area of the shop. The superior is expected to devote $1 / 6$ of his time in supervising the machine. General lighting are to be apportioned on the basis of floor area.
(b) Write a brief note on -
a) Cost and Costing
b) Cost Object
c) Cost Centre
d) Cost Unit

