Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov/Dec – 2018**

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| **Code : 18MS3015** |  | **Duration** : | **3hrs** |
| **Sub.Name : STRATEGIC COST MANAGEMENT** |  | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Define ‘Research and Development Costs’. Explain the treatment of research and development costs in cost accounts and set out a procedure for control of such costs. | CO1 | 10 |
| b. | How will you treat the research and development costs in connection with (i) Job undertaken on behalf of a customer; and (ii) Improvement in existing products? | CO1 | 10 |
| (OR) | | | | |
| 2. | a. | Distinguish between ‘Differential Cost’ and ‘Marginal Cost’. | CO1 | 10 |
| b. | A company is at present working at 90% of its capacity and producing 13,500 units per annum. It operates a flexible budgetary control system. The following figures (excluding material and labour cost) are obtained from its budget:  (Rs.)   |  |  |  | | --- | --- | --- | |  | **90%** | **100%** | | 1. Sales | 15,00,000 | 16,00,000 | | 1. Fixed Expenses | 3,00,500 | 3,00,500 | | 1. Semi- fixed Expenses | 97,500 | 1,00,500 | | 1. Variable Expenses | 1,42,000 | 1,49,500 |   Material and Labour Cost per unit are constant under present conditions Profit margin is 10% at 90% capacity.   1. You are required to determine the cost of producing an additional 1,500 units. 2. What would you recommend for an export price for these 1,500 units taking into account that overseas prices are much lower than indigenous prices? | CO2 | 10 |
|  |  |  |  |  |
| 3. |  | Bombay Steel Ltd. Manufactures four products, namely A,B,C and D, using the same plant and process.The following information relates to a production period:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Product | Volume | Material Cost Per unit (Rs.) | Direct labour per unit | Machine time per unit | Labour Cost per unit | | A | 500 | 5 | 1 / 2 hour | 1 / 4 hour | 3 | | B | 5,000 | 5 | 1 / 2 hour | 1 /4 hour | 3 | | C | 600 | 16 | 2 hours | 1 hour | 12 | | D | 7,000 | 17 | 1-1/2 hours | 1-1/2 hours | 9 |   Total production overhead recovered by the cost accounting system is analysed under the following headings: (Rs.)   |  |  | | --- | --- | | Factory overhead applicable to machine-oriented activity | 37,424 | | Set-up costs are | 4,355 | | Cost of ordering materials | 1,920 | | Handling materials | 7,580 | | Administration for spare parts | 8,600 |   These overhead costs are absorbed by products on a machine hour rate of Rs. 4.80 per hour giving an overhead cost per product of:   |  | | --- | | A=Rs. 1.20 B=Rs.1.20 C=Rs. 4.80 D=Rs. 7.20 |   However, investigation into the production overhead activities for the period reveals the following totals:   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Product | Number of set-ups | Number of material Orders | Number of times material was handled | Number of spare parts | | A | 1 | 1 | 2 | 2 | | B | 6 | 4 | 10 | 5 | | C | 2 | 1 | 3 | 1 | | D | 8 | 4 | 12 | 4 |   You are required:   1. To compute an overhead cost per product using Activity Based Costing, tracing overheads to production units by means of cost drivers. 2. To comment briefly on the differences disclosed between overheads traced by the present system and those traced by Activity Based Costing. | CO2 | 20 |
| (OR) | | | | |
| 4. |  | PH Ltd., has two manufacturing departments organised into separate profit centres known as the Basic unit and processing unit. The Basic unit has a production capacity of 4,000 tonnes per month of chem vax but at present its sales are limited to 2,000 tonnes to outside market and 1,200 tonnes to the processing unit.  The transfer price for the year 2003 was agreed at Rs. 400 per tone. This price has been fixed in line with the external wholesale trade price on 1st January,2003. However, due to heavy competition to basic unit has been forced to reduce the wholesale trade price to Rs. 360 per tone with effect from 1st June,2004. This price, however,was not made applicable to the sales made to the processing unit of the company. The processing unit applied for revision of the price as applicable to the outside market buyers as from 1st June, 2004 but the same was turned down by the basic unit.  The processing unit refines chem. Vax and packs the output known as colour-X in drums of 50 kg.each. The selling price of colour-X is Rs.40 per drum. The processing unit has a potential of selling a further quantity of 16,000 drums of colour-X provided the overall price is reduced to Rs.32 per drum. In that event it can buy the additional 800 tonnes of chem vax from the basic unit whose capacity can be fully utilized. The outside market will not however absorb more than the present quantity of 2,000 tonnes.  The cost data relevant to the operation are:   |  |  |  | | --- | --- | --- | | **Particulars** | **Basic unit Rs.** | **Processing unit Rs.** | | Raw Material/ tone | 70 | Transfer Price | | Variable costs/tone | 140 | 170 | | Fixed costs/month | 3,00,000 | 1,20,000 |   **Required:**   1. Prepare statements showing the estimated profitability for June, 2004 for each unit and the company as a whole on the following basis: 2. At 80% and 100% capacity utilization of the basic unit at a market price and transfer price to the processing unit of Rs. 400 per tone. 3. At 80% capacity utilization of the basic unit at the market price of Rs. 360 per tonne and the transfer price to the processing units of Rs.400 per tone. 4. At 100% capacity utilisation of the basic unit at the market price and transfer price to the processing unit of Rs.360 per tone. 5. Comment on the effect of the company’s transfer pricing policy on the profitability of the processing unit. | CO3 | 20 |
|  |  |  |  |  |
| 5. | a. | Explain the term ‘life-cycle’ costing | CO2 | 10 |
| b. | In organic Chemicals Ltd. is about to replace its old boiler equipment, either by a coal-fired system or by an oil-fired system. Finance costs 15% a year, and other estimated costs are as follows:   |  |  |  | | --- | --- | --- | |  | Coal | Oil | | Initial cost of boiler | 70 | 100 | | Annual operating costs | 60 p.a. | 45 p.a. |   If the company expected the new boiler system to last at least fifteen years, which system should be chosen? | CO2 | 10 |
| (OR) | | | | |
| 6. | a. | What is target costing and what are the stages to the methodology? | CO1 | 10 |
| b. | In a period a company has the following transactions:   |  |  | | --- | --- | | Purchase of raw materials | (Rs.) 85,000 | | Conversion | (Rs.) 68,600 | | Production | (Units) 4,900 | | Sales | (Units) 4,850 |   There were no opening stocks of raw materials, WIP or finished goods. The standard cost per unit is Rs. 31 (Rs.17 Materials + Rs. 14 Conversion cost). There was no closing WIP at the end of the period.  Show the Journal entries for a back-flush accounting system using a Raw material and In Process Account. | CO3 | 10 |
|  |  |  |  |  |
| 7. |  | Elaborate upon Kaizen, Japanese Technique which conveys the message ‘Small Drops of water together, ultimately result in a lake . | CO3 | 20 |
| (OR) | | | | |
| 8. |  | State the main types of information which will be required by a manager to implement the balanced scorecard approach to performance measurement. | CO2 | 20 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | An ancillary industry has received an order from a large industry for the manufacturing of one lakh components @ Rs. 600 for 1000 numbers for which there is a rising demand. The raw materials required are mild steel strips and spring steel strips which will be drawn in press for making components by using tools and dies. Calculate the estimated cost of production and margin of profit if any from the following data and submit your recommendations as to whether the order should be accepted or not.   1. 0.30 M.tonne and 0.20 M.tonne of mild steel strip and spring steel strip respectively are required to complete the order. These strips are available in the form of coils. 2. Raw materials: 3. Mild steel (i) Rs. 2,100 per M.tonne if purchased in quantities of more than one M.tonne (ii) Rs.2,200 peer M.tonne if purchased in quantities of less than one M.tonne. 4. Spring steel (i) Rs. 4,200 per M.tonne if purchased in quantites of more than one M.tonne (ii) Rs. 4,500 per M.tonne if purchased in quantities of less than one M.tonne. 5. Manufacturing period 2 months for one lakh no. of components. 6. Wages –Rs.4,500 per month. 7. Capital cost of existing press (capacity exists) (assume depreciation 10% per annum) Rs.1.20 lakhs. 8. Additional special equipments required Rs. 2,000 (depreciation 10% per annum) 9. Estimated cost of manufacture of special tools and dies Rs. 30,000 (life is estimated to cover manufacture of one million components) 10. Recurring expenses for grinding of tools and dies to complete the order – Rs. 1,000 11. Cleaning and phosphating cost – 5 paise for each component. 12. Supervision and overhead expenses of the shop-Rs.1,000 per month. 13. Share of other service and administrative section Rs. 1,500 per month. 14. Selling and distribution expenses – 5 per cent of the total cost. 15. Provision of rejection by customer- 10%. | CO3 | 20 |