# K.J. Somaiya Institute of Management Studies \& Research Course: PGDM (IB) III Trim Sub: Management Control System 

Time: 2 Hours
Marks: 25
Date : 31/03/2018
Note: Solve all the questions

1. A company is organized into two divisions. Division A produces a component which is used by division B in making a final product. The final product is sold at Rs 400 each. Division A has a capacity to produce 2000 units and the entire quantity can be purchased by division B .

Division A informed that due to installation of new machines, its depreciation cost has gone up and hence wants to increase the price of the component to be supplied to division B to Rs 220. Division B however can buy the component from the outside market at Rs 200 each. The variable cost of division A is Rs 190 and fixed cost Rs 20 per component. The variable cost of division B in manufacturing the final product by using the component is Rs 150 (excluding the component cost).

Required: (i) If there are no alternative uses for the production facilities of A , will the company benefit if Division B buys from outside suppliers at Rs 200 per components?
(ii) What should be the transfer price, if Division B decides to buy from Division A?
( 10 M )
OR

Write short notes on any two- (5 Marks each )
a) Strategy Formulation and Management Control
b) MCS of Non Profit Organizations
c) Responsibility Centre
2. Sai associates have three divisions $M, P$ and $C$ are respectively engaged in activities of Marketing, Manufacturing and Both. Information about these divisions is tabulated below wherein all figures are in thousand rupees.

| Particulars | Division M | Division P | Division C |
| :--- | :--- | :--- | :--- |
| Current assets | 200 | 200 | 200 |
| Fixed assets | Nil | 1000 | 500 |
| Profit before Dep., Market <br> development , Operating Exp. | 400 | 400 | 400 |

Depreciation for all assets is on original cost basis (10 years). Operating expenses of divisions M, P and C are Rs 200 lacs, 100 lacs and 150 lacs respectively.
a) Compute rate of return for each division?
b) Analyze and comment on the relationship if any between ROI achieved and the activities of the divisions.
3. Stellar system company manufacturers' guidance systems for rockets used to launch commercial satellites. The company's software division reported the following result for the year-

| Income | Rs 3,00,000 |
| :--- | :---: |
| Sales Revenue | Rs $20,00,000$ |
| Invested capital (Total capital) | Rs $30,00,000$ |
| Average current liabilities | Rs 20,000 |

Stellar systems' weighted average cost of capital (WACC) is $9 \%$ and the company's tax rate is $40 \%$. Moreover the company's required rate of return on invested capital is $9 \%$.
c) Required- (i) Compute the software division's sales margin, capital turnover, return on investment, residual income and economic value added for the year.
4. The production manager of Miller Enterprises plans to have an inventory on hand at the end of each month that will equal $150 \%$ of the next month's sales. This requirement was met at the end of February. A sales budget for the four months ending June 30th is as follows:

| Months | Units |
| :--- | :--- |
| March | 30,000 |
| April | 50,000 |
| May | 80,000 |
| June | 40,000 |

Required: Prepare a production budget for April and May.

