## K. J. SOMAIYA INSTITUTE OF MANAGEMENT STUDIES AND RESEARCH Vidyavihar Mumbai- 400077 Program: PGDM- FS SEM-6 Subject: Management Control Systems (End Term Examination)

Maximum Marks: 50 Duration: 3 hours

Date: 7 April, 2017

#### Instructions

Question No. 1 is <u>compulsory.</u> Out of the remaining questions, attempt any THREE.

### Question 1

Prepare a Balanced Scorecard for the Case of Domestic Auto Parts which is attached.

### Question 2.

Asian artifacts manufactured terracotta sculpture horses which were famous in the art market. The horses were all of the same size.

The following information is the static budget for 2018:

Expected sales was 5000 units at Rs.300 per horse. The sales manager was responsible for this.

The production manager was expected to produce the quantity which the sales manager could sell.

The standard quantity of the special mud used was 10 kilo per horse.

The purchase manager was expected to buy the material at Rs.10 per kilo The production manager was expected to use four hours labour per horse The personnel manager was expected to hire labour at Rs.40 per hour. Other fixed costs was Rs.1,00,000 controlled by the general manager

The actual results of the year were: Produced and sold 6000 horses at Rs.590 Direct Material 54,000 kg at Rs.11 per kg Direct labour 25000 hours at Rs. 38 per hour Actual fixed costs Rs.1,05,000 It was decided that a bonus of five per cent on favourable variances and penalty of one percent on unfavouable variances will be distributed to the responsibility holders.

Required:

Suggest the amount of variances to be distributed to each RC. Explain your variances.

### **Question 3**

The AB Co has two divisions X & Y. One of the parts produced by Division X is used in the manufacture of a product that is assembled at Division Y. This part is not unique and there is readily defined market so that X can sell outside the firm and Y can buy from outside.

Following details are available in respect of Division	X –
Capacity to produce the part	1,25,000 units
External sales at Rs.100 per unit	1,00,000 units
Transfer to Division Y	25,000 units
Variable production cost per unit	Rs.84
Variable selling cost per unit ( only on external sales)	) Rs.2
Fixed production costs per unit (based on 1,25,000	units) Rs.6
Fixed selling costs per unit (based on 1,00,000 units	s) Re.1

The Division Y represents the following data on the assumption of a volume of 25,000 units ( one part is required for each unit of its own production )

Variable production cost per unit (excluding transfer or outside purchase price) Rs 100

Variable selling cost per unit	Rs.6
Fixed production cost per unit	Rs.10
Fixed selling cost per unit	Rs.4
Selling price of Finished product	Rs.240

You are required to make the following calculations:

- 1. If Division X could sell 1,25,000 units at Rs.100 each in the outside market, what transfer price the central management would prefer in order to provide proper motivation to Division Y
- 2. As a Management Accountant, would you advise Division Y to buy at the transfer price determined in 'a' above?
- 3. Assume transfer price as in 'a ' above If selling price drops to Rs.200 , should Division y buy at that price? Would this be advisable from the point of view of the firm and why?

**Question 4** The Super Mall Co Ltd. is expanding its activities. The company is weighing various options for expanding their business. The CEO uses ROI to measure the performance of its divisions and evaluate proposals. Two divisional managers' final annual reports are given below. They have come up with fresh proposal for expansions which will double their capacity. The company's cost of capital is 12%.

	Division A	Division B
Capital invested	Rs.48,00,000	80,00,000
Net Income	Rs. 9,60,000	14,40,000
ROI	20%	18%

The CEO has recommended incentives based on the present system. But the Division B is unhappy with this and he does not agree with the decision .

a) What performance measurement procedure would more clearly show the relative profitability of the two divisions.

b) Should the company approve the proposal of Division B which is below that of A given that the company does not want to start both at one go?

c) Suppose the manager of Division A was offered a short term less than an year

project with an investment of Rs.20,00,000 which would bring a profit of Rs300,000, should the manager accept this project if he was to be evaluated on Return on Investment?

# Question 5 Answer any TWO

- a) Explain the problems of using ROI as a performance measure
- b) Which transfer pricing approach is better
- c) How is a Balanced Scorecard a superior measure of performance?

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