

Test Series: April'2021

MOCK TEST PAPER – 2

FINAL COURSE: GROUP – II

PAPER – 5: STRATEGIC COST MANAGEMENT AND PERFORMANCE EVALUATION

Question No. 1 is compulsory

*Answer any **four** questions from the remaining **five** questions*

Time Allowed – 3 Hours

Maximum Marks – 100

1. Nations' Mart is the supplier of packed grocery items to local kirana shops and departmental stores under a franchise model. Such local kirana shops and departmental stores are not an exclusive franchisee of Nations' Mart, because certain other items such as veggies, cosmetics, eggs, and bread, etc. which are not offered by Nations' Mart, these local kirana shops and departmental stores are free to buy from other suppliers.

Nations' Mart offers items under its own brand, they purchased these grocery items either directly from manufacturers or from their established suppliers at a significant discount, part of which it passes to such franchisee local kirana shops and departmental stores. It is estimated that such local kirana shops and departmental stores save around 8-12% (of purchase prices) on items supplied by Nations' Mart.

For inbound logistics since its establishment, Nations' Mart relies upon the manufacturer or their established suppliers and in some cases use the service of haulage contractors working on behalf of these manufacturer or suppliers. Nation's Mart purchases items into their large and multi-purpose regional warehouses. Warehouses have facilities for re-package of items in smaller units. Each regional warehouse has designated geographical areas to serve.

Nations' Mart sales representatives conduct the meeting with each franchisee (local kirana shops and departmental stores) after every 8 weeks to decide the weekly standing order quantity for the upcoming 8 weeks. Such weekly standing orders delivered to these local kirana shops and departmental stores through specialist haulage contractors local to the regional warehouse. Such local kirana shops and departmental stores can increase the weekly order through phone or e-mail, but can't reduce their standing order requirements until the next meeting with a sales representative of Nations' Mart.

Required

The board of directors recognised the need to review the supply chain to enhance the brand recognition of Nations' Mart and also address the issue raised by the franchisee regarding inflexible ordering and delivery system. ADVISE the board, how Nations' Mart can re-structure its supply chain presuming it keep on supplying the re-packaged items.

(20 Marks)

2. X Technologies Ltd. develops cutting-edge innovations that are powering the next revolution in mobility and has nine tablet smart phone models currently in the market whose previous year financial data is given below:

Model	Sales (Rs.'000)	Profit-Volume (PV) Ratio
Tab - A001	5,100	3.53%
Tab - B002	3,000	23.00%
Tab - C003	2,100	14.29%
Tab - D004	1,800	14.17%
Tab - E005	1,050	41.43%
Tab - F006	750	26.00%
Tab - G007	450	26.67%
Tab - H008	225	6.67%
Tab - I009	75	60.00%

Required

- (i) Using the financial data, carry out a Pareto ANALYSIS (80/20 rule) of Sales and Contribution. **(8 Marks)**
- (ii) DISCUSS your findings with appropriate RECOMMENDATIONS. **(12 Marks)**
3. X Ltd. first opened its door in 1991 for business and now it is a major supplier of metals supporting over a dozen different industries and employs experts to support each industry. These include Wood & Panel Products Manufacturing, Hearth Products, Site Furnishings, Commercial and Residential Construction etc. It has grown through devotion to its customers, dedication to customer service and commitment to quality products. The company has two divisions: Division 'Z' and Division 'E'. Each division work as an investment centre separately. Salary of each divisional manager is Rs. 7,20,000 per annum with the addition of an annual performance related bonus based on divisional return on investment (ROI). A minimum ROI of 12% p.a. is expected to be achieved by each divisional manager. If a manager only achieves the 12% target, he will not be rewarded a bonus. However, for every whole 1% point above 12% which the division achieves for the year, a bonus equal to 3% of annual salary will be paid subject to a maximum bonus of 20% of annual salary. The figures belonging to the year ended 31 March 2020 are given below:

	Division 'Z' ('000)	Division 'E' ('000)
Revenue	29,000	17,400
Profit	5,290	3,940
Less: Head Office Cost	(2,530)	(1,368)
Net Profit	2,760	2,572

Non- Current Assets	19,520	29,960
Cash, Inventory, and Trade Receivable	4,960	6,520
Trade Payable	5,920	2,800
Manager Responsible	HAI	FAI

During the financial year 2019-20, FAI manager of Division 'E' invested Rs. 13.6 million in new equipment including an advanced cutting machine, which will increase productivity by 10% per annum. HAI, manager of Division 'Z', has made no investment during the year, even its computer system needs updation. Division 'Z's manager has already delayed payments of its suppliers due to limited cash & bank balance although the cash balance at Division 'Z' is still better than that of Division 'E'.

Required

- (i) For each division, COMPUTE, ROI for the year ending 31 March 2020. EXPLAIN the figures used in your calculation. **(6 Marks)**
 - (ii) COMPUTE bonus of each manager for the year ended 31 March 2020. **(4 Marks)**
 - (iii) DISCUSS whether ROI provides justifiable basis for computing the bonuses of managers and the problems arising from its use at X Ltd. for the year ended 31 March 2020. **(10 Marks)**
4. (a) 'F' manages the school canteen (approximately 1,600 students) at Delhi. The current cash payment system requires three clerks (paid Rs.90 per hour), employed for about 4 hours a day. The canteen operates approximately 240 days a year.

'F' is considering a Wireless Cash Management System (WCMS), where a student could just swipe an ID Card for payment. This system would cost Rs.1,25,000 to setup and Rs.36,000 per year to operate. 'F' believes that he could manage with one clerk if he were to implement the system.

Required

ADVISE 'F' on the choice of a plan, assuming working life of WCMS as 5 years. (Ignore the time vale of money) **(5 Marks)**

OR

IDENTIFY the Pricing Strategy to be adopted with reference to the following situations. You are not required to explain the reasons for your answer.

- a. Eddisson Enterprises has piled up stocks in large quantities and the market price has fallen.
- b. Acqua LLP follows a new product pricing strategy through which company makes profitable sales by selling out few units.

- c. X Ltd. produces Product X a revolutionary product and as a reward for innovation and for taking first initiative which pricing strategy should X Ltd. adopt?
- d. An established company has recently entered the stationery market segment and launched quality paper for printing at home and office.
- e. D is a perishable item, with more than 80% of its shelf life is over.

(1 x 5 = 5 Marks)

- (b) The MD of P Limited, a 150 persons engineering company, decided it was time to fire the company's biggest client. Although the client provided close to 60% of the company's annual revenue, P Limited decided that dropping this client was necessary. The client was profitable.

The MD of P Limited stated "We cannot be a great place to work without employees, and this client was bullying my employees. Its demands for turnaround were impossible to meet even with people working seven days a week. No client is worth losing my valued employees".

The initial impact on revenues was significant. However, P Limited was able to cut costs and obtain new customers to fill the void. Moreover, the dropped client later gave P Limited two projects on more equitable terms.

Required

- (i) DISCUSS the reasons behind dropping of a profitable client by P Limited.

(3 Marks)

- (ii) STATE two qualitative factors that management should consider in outsourcing and make or buy decisions.

(2 Marks)

- (c) 'Ax' and 'Bx' are two customers of N Electronics Ltd., a manufacturer of audio players. Selling price per unit is Rs.5,400. Its cost of production per unit is Rs.4,420.

Additional costs are:

Order Processing Cost.....Rs.2,000 per order

Delivery Costs.....Rs.3,500 per delivery

Details of customers 'Ax' and 'Bx' for the period are given below:

	Customer 'Ax'	Customer 'Bx'
Audio Players purchased (nos.)	350	500
No. of orders	5 (each of 70 units)	10 (each of 50 units)
No. of deliveries	5	0

The company's policy is to give a discount of 5% on the selling price on orders for 50 units or more, and to further give 8% discount on the undiscounted selling price if a customer uses his own transport of collect the order. Assume that production levels are not altered by these orders.

Required

- (i) ANALYSE the profitability by comparing profit per unit for each customer.

(6 Marks)

- (ii) COMMENT on the discount policy on delivery.

(4 Marks)

5. (a) N₂N Co., is engaged in manufacturing many chemical products. It is using many chemicals some of which are fast moving, some are slow moving and few are in non-moving category. The company has a stock of 10 units of one non-moving toxic chemical. Its book value is Rs. 2,400, realizable value is Rs. 3,500 and replacement cost is Rs. 4,200.

One of the customers of the company asks to supply 10 units of a product which needs all the 10 units of the non-moving chemical as an input. The other costs associated with the production of the product are:

Allocated overhead expenses..... Rs. 16 per unit

Out of pocket expenses..... Rs. 50 per unit

Labour cost Rs. 40 per hour

(for each unit two hours are required)

Other material cost..... Rs. 80 per unit.

The labour force required for the production of the product will be deployed from among the permanent employees of the company. This temporary deployment will not lead to any loss of contribution.

Required

- (i) RECOMMEND the minimum unit price to be charged to the customer without any loss to the company.

(4 Marks)

- (ii) ANALYSE with reasons for the inclusion or exclusion of each of the cost associated with the production of the product.

(4 Marks)

- (iii) ADVISE a pricing policy to be followed by N₂N in perfect competition. **(2 Marks)**

- (b) GRV is a chemical processing company that produces sprays used by farmers to protect their crops. One of these sprays 'Agrofresh' is made by using either chemical A or chemical B. To produce one litre of Agrofresh spray they have the option to use either 12 litres of chemical A or 12 litres of chemical B. During the financial year, the purchase department of GRV has planned to use chemical B as it appeared that it would be the cheaper of the two and their plans were based on a cost of chemical B of Rs. 15 per litre.

Due to subsequent market movement during the year the actual prices changed and if the concerned department had purchased efficiently, the cost would have been-

Chemical A	Rs. 15.40 per litre
Chemical B	Rs. 16.00 per litre

Production of Agrofresh spray was 11,000 litres and the usage of chemical B was 12,800 litres at a cost of Rs. 2,09,920.

You are the CEO of GRV and the Management Accountant has sent to you the following suggestions through e-mail:

"I feel that in our particular circumstances the traditional approach to variance analysis is of little use as for some of our products we can utilize one of several equally suitable chemicals and we always plan to use such chemical which will lead to cheapest production costs. However due to sharp market movements, we are frequently trapped by the sharp price changes which lead to the choice of expensive alternative at the end."

To check the reality in the content of the mail, you asked, the Management Accountant of the company:

- (i) to CALCULATE the material variances for Agrofresh by using
 - Traditional Variance Analysis
 - Planning and Operational Variances **(6 marks)**
- (ii) to ANALYSE how planning and operational variances approached the variances. **(2 marks)**
- (iii) to ANALYSE how the advanced variances are useful to your organisation. **(2 marks)**

6. (a) The CEO of P Limited is concerned with the amounts of resources currently spent on customers warranty claims. Each box of its product is printed with the logo: "satisfaction guaranteed or your money back". P is having difficulty competing with X Limited because it does not have the reputation for high quality that X Limited enjoys. Since the warranty claims are so high, the CEO of P Limited would like to assess what costs are being incurred to ensure the quality of the product. Following information is collected from various departments within the company relating to 2019-20:

	Rs.
Warranty claims	4,25,000
Employee training costs	1,20,000

Rework	3,00,000
Lost profits from lost customers due to impaired reputation	8,10,000
Cost of rejected units	50,000
Sales return processing	1,75,000
Testing	1,70,000

For the year 2020-21, the CEO is considering spending the following amounts on a new quality programme:

	Rs.
Inspect raw material	1,20,000
Reengineer the production process to improve product quality	7,50,000
Supplier screening and certification	30,000
Preventive maintenance on plant equipment	70,000

P expects the new quality programme to save costs by the following amounts:

	Rs.
Reduction in lost profits from lost sales due to impaired reputation	8,00,000
Reduction in rework costs	2,50,000
Reduction in warranty costs	3,25,000
Reduction in sales return processing	1,50,000

Required

- (i) PREPARE a Cost of Quality Statement for the year 2019-20 showing the percentage of the total costs of quality incurred in each cost category.

(3 Marks)

- (ii) PREPARE a cost benefit analysis of the new quality programme showing how the quality initiative will affect each cost category.

(3 Marks)

- (iii) STATE how the manager trade-offs among the four categories of quality costs.

(4 Marks)

- (b) BYZ, a leading school of management in the heart of India's financial centre of Mumbai, preparing its budget for 2020. In previous years, the director of the school has prepared the budget without the participation of senior staff and presented it to the school board for approval.

Last year the Board blasted the director over the lack of participation of his senior staff in the budget process for 2019 and requested that for the 2020 budget the senior staff were to be involved.

Required

LIST the potential advantages and disadvantages to the BYZ of involving the senior staff in the budget preparation process. ***(10 Marks)***