Test Series: October, 2020

MOCK TEST PAPER

FINAL (NEW) 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. "Z" Electronics manufactures and sells various electronic goods like mobile phones, laptops, televisions, refrigerator etc. The company sells these goods through the 30 stores situated in different parts of the country. The store managers place a request to the centralised team situated in Mumbai on a monthly basis. One store can send only one requisition per month.

   The requirements of the stores are forwarded to the production planning team which is responsible for scheduling the manufacturing of these products. Once the goods are manufactured, the goods are sent to a central warehouse in Mumbai and are dispatched to different stores according to the store requirements. The time taken from placing a request from store to the delivery of product to the store takes about 30-40 days on an average. In the process the company procures parts from more than 100 vendors. The company has faced quality related issues with many vendors leading to delay in production.

   The average holding period of inventory in "Z" Electronics is very high at 45 days as against an industry average of 15 days. Since the order to delivery time at a store is very high, the company has traditionally allowed high inventory holding to reduce the stock outs at store level. The company is under severe pressure to improve its working capital cycle.

   A high amount of inventory held at each store also means that the products become obsolete quickly. In case of products like mobile phones, new and upgraded versions are available in the market as early as six months from the date of initial launch of a particular model. A significant portion of inventory of mobile phones becomes obsolete every year. The company generally resorts to a discounted sale to liquidate such obsolete models.

   The management at "Z" Electronics has identified e-commerce as an opportunity for faster growth, both in terms of revenues and profitability. The company is considering launch of its own e-commerce website to sell all products which are currently being sold in physical stores. Depending upon the success of online sales, the company might choose to optimize and close certain physical stores in the next couple of years.

   The management of the company is cognizant of the fact that existing inventory procurement and management system will not fit in the new e-commerce business. E-

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commerce works on a inventory light model and quick as well as on time delivery of products of the customers. The fact that customers could be from a location other than those where "Z" Electronics has physical presence makes the matter complex.

Required

The company is considering implementation of a supply chain management system. Will a supply chain management system be of use to "Z" Electronics in light of the e-commerce venture? You are required to EXPLAIN the concept of Supply Chain Management and EVALUATE the applicability of in the current case. ***(20 Marks)***

2. Generation 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 (₹'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. The Soup Ltd. offers a range of beauty parlor services like hair care, body care, manicures/ pedicures, skincare, etc. It has 150 Centre/s across the country. The business of beauty parlor is extremely competitive in all region. Each centre operates autonomously and managers are able to offer customize services.

Soup's mission statement is "to inspire and enhance beauty by using knowledge and experience". To establish long term relationship of trust and commitment with clients, Soup wants to provide their client highest level of satisfaction with emphasis on;

- Service Customization
- Professionalism, Work, and Clinical Responsibility
- Client's Feedback

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Company has developed a website where it creates blogs, post high-quality content related to beauty tips. Website is also connected to social media to reach customers. If a customer searches Soup's services on search engine, it automatically redirects to the place of nearest service center. Soup's all services are presently booking through online channel.

Results for one of the center, "Roop", are given below. The column headed "Centre" shows the **average figures** for all Centre/s:

Particulars	Roop Oct'20	Centre Oct'20
Revenue (₹)	91,26,000	1,08,66,900
Gross profit (₹)	48,50,400	51,37,740
Number of senior Beauticians	90	110
Number of junior Beauticians	60	55
Number of website hits	15,010	19,260
Total number of services booked online and completed	9,915	12,270
Number of services taken from repeat customers	1,510	1,605
Total time spent completing jobs (hours)	24,120	25,880
Number of new service packages	3	2
Customer percentage in terms of feedback forms showing score of 9 or 10	86%	77%

Notes

(1) Beauticians are categorized as 'senior' if they have been qualified for more than three years.

(2) 'Junior' Beauticians includes both trainee beauticians and beauticians who have been qualified for less than three years.

(3) The Roop launched three new service packs during the year:

- free coupon of worth ₹600 for services over and above ₹1,200.
- a head massage costing only ₹240, instead of the usual ₹480, for 10 days advanced bookings.
- a haircut ₹120 will be charge, which usually costs ₹360, for all customers booking hair spa.

These three new service packs produced revenues of ₹7,92,000; ₹6,96,000 and ₹6,48,000 respectively. Two comparable new service packs developed by other centre/s produced revenues of ₹5,28,000 and ₹5,04,000.

(4) Customers to rate the particular centre from 1 to 10 in an online feedback form with 10 being the best.

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The Chief Executive Officer (CEO) of Soup has recently attended a webinar and heard about Building Block Model of Performance Management. The CEO is interested to know how the dimensions block could be applied at Soup Ltd.

Required

(i) ANALYZE Roop's performance relative to the other Centre/s. ***(12 Marks)***

(ii) EXPLAIN how the Standards and Rewards blocks support the Dimensions block in case of Building Block Model. ***(8 Marks)***

4. (a) (i) "M" is a leading manufacturing company. Under increasing pressure to reduce costs, to contain inventory and to improve service, "M"'s Costing Department has recently undertaken a decision to implement a JIT System.

The management of "M" is convinced of the benefits of their changes. But Supplies Manager Mr. Bee fears with the Costing Department's decision. He said:

"We've been driven by suppliers for years ... they would insist that we could only purchase in thousands, that we would have to wait weeks, or that they would only deliver on Mondays!"

Required

Is Mr. Bee's view- point correct? COMMENT. ***(5 Marks)***

(ii) 'N' manages the school canteen (approximately 1,600 students) at Noida. The current cash payment system requires three clerks (each paid ₹90 per hour), employed for about 4 hours a day. The canteen operates approximately 240 days a year.

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

Required

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

OR

Olderhelp India is a leading charity working with and for the disadvantaged elderly for over 5 decades. Olderhelp advocates for their needs for universal pension, quality healthcare, action against elder abuse and many more. Olderhelp collects donations and funds and utilises them for the welfare of elders. The governing body of Olderhelp has setup four performance objectives for the three months to 30 Sep 2020:

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- to achieve a level of donation of ₹30,00,000
- to keep advertisement cost not more than 3% of donation
- to keep welfare cost more than 85% of donation
- to achieve 90% of respite care requested from the community

Actual results were as follows:

	July	Aug	Sep
Donation (₹)	7,00,000	13,00,000	11,00,000
Advertisement Costs (₹)	17,500	52,000	33,000
Elder's welfare cost (₹)	5,74,000	10,92,000	979,000
Respite care requests (days)	1,120	1,140	1,200
Respite care provided (days)	896	1,003	1,104

The aim is to serve elder needs in a holistic manner, enabling them to live active, dignified and healthier lives.

Requirement

PREPARE a statement to assist the manager in evaluation performance against objectives. ***(5 Marks)***

(b) NAC miners operates two divisions, one in Japan and other in United Kingdom (U.K.). Mining Division is operated in Japan which is rich in raw emerald.

The other division is United Kingdom Processing Division. It processes the raw emerald into polished stone fit for human wearing.

The cost details of these divisions are as follows:

Division	Japan Mining Division	United Kingdom Processing Division
	Per carat of raw emerald	Per carat of polished emerald
Variable Cost	2,500 Yen	150 Pound
Fixed Cost	5,000 Yen	350 Pound

Several polishing companies in Japan buy raw emerald from other local Mining Companies at 9,000 Yen per carat. Current Foreign Exchange Rate is 50 yen = 1 Pound. Income Tax rates are 20% and 30% in Japan and the United Kingdom respectively.

It takes 2 carats of Raw Yellow emerald to yield 1 carat of Polished Stone. Polished emerald sell for 3,000 Pounds per carat.

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Required

(i) COMPUTE the transfer price for 1 carat of raw emerald transferred from Mining Division to the Processing Division under two methods - (a) 200% of Full Costs and (b) Market Price. ***(2 Marks)***

(ii) 1,000 carats of raw emerald are mined by the Japan Mining Division and then processed and sold by the U.K. Processing Division. COMPUTE the after tax operating income for each division under both the Transfer Pricing Methods stated above in (i). ***(8 Marks)***

5. (a) HEL Limited is a manufacturing company that produces a wide range of consumer products for home consumption. Among the popular products are its energy efficient and environment friendly LED lamps. The company has a quality control department that monitors the quality of production.

As per the recent cost of poor quality report, the current rejection rate for LED lamps is 5% of units input. 5,000 units of input go through the process each day. Each unit that is rejected results in a ₹200 loss to the company. The quality control department has proposed few changes to the inspection process that would enable early detection of defects. This would reduce the overall rejection rate from 5% to 3% of units input. The improved inspection process would cost the company ₹15,000 each day.

Required

(i) ANALYSE the proposal and suggest if it would be beneficial for the company to implement it. ***(4 Marks)***

(ii) After implementation, ANALYSE the maximum rejection rate beyond which the proposal ceases to be beneficial? ***(6 Marks)***

(b) Established in the year 1998, Exceptional Woodcraft Limited (EWPL) is one of the distinguished manufacturers and suppliers of an unlimited array of Wooden Furniture Items. Product compilation comprises of Modular Furniture, Workstations, and Cafeteria Furniture. Moreover, it is also engaged in presenting Furniture Services that include Interior Fit Out, Office Interiors and Corporate Interior Designing. Since inception, it has strived to proffer an excellent blend of optimum quality and price, and successfully established the company as the preferred choice of customers in the past years. This is the reason that its products and services are applauded in the industry for its flawlessness.

At EWPL, a world-class infrastructure is set up with different types of latest technology based machines and equipment, which provide great support in hassle-free production and storage of the proffered assortment. Besides the spacious workspace, it has recruited a team of skilled and experienced professionals, who are

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magnificently trained to understand and meet the diverse client requirements within the committed time period. It aims to attain complete client satisfaction and put in its best efforts to achieve the same by offering outstanding product range & feasible services.

EWPL's Budgeting Process for Sales

1) Each salesgirl makes a customer-wise listing of sales for the last few years. Based on this information and her knowledge about customer's requirements, she determines an overall sales goal.

2) The sale manager, W Robert, gathers all this information and modifies it a bit. Particularly, W looks at variance in sales growth and modifies low projections to be in line with the average. He, of course, discusses this correction with the concerned salesgirl. The usual approach is to hold up the other forecasts and attribute lack of sales growth to lower talent.

3) W then meets with J Donald, Managing Director. By this time, J already back out of his sales expectations for next year based on his desired profit. J discusses the overall target with the W. The usual result is a 7% to 10% increase in projected sales, which the W allocates among the salesgirls based on their past performance.

4) Of course, J desires that the W discuss and negotiate any alteration with the sales force. He believes that with appropriate logics, not high but attainable targets for his sales team can be met.

Required

(i) DISCUSS the participative nature of the sales budgeting process at EWPL.

(ii) ADVISE on best approach from EWPL's perspective that may be adopted.

6. (a) AB Chemicals, 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 firm has a stock of 10 units of one non-moving toxic chemical. Its book value is ₹2,400, realizable value is ₹3,500 and replacement cost is ₹4,200.

One of the customers of the firm 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 ₹16 per unit

Out of pocket expenses ₹50 per unit

Labour cost ₹40 per hour. For each unit two hours are required.

Other material cost ₹80 per unit.

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The labour force required for the production of the product will be deployed from among the permanent employees of the firm. 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 firm. ***(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) ADVICE a pricing policy to be followed by AB Chemicals in perfect competition. ***(2 Marks)***

(b) Y Ltd., based in Kuala Lumpur, is the Malaysian subsidiary of Japan's NY corporation, headquartered in Tokyo. Y's principal Malaysian businesses include marketing, sales, and after-sales service of electronic products & software exports products. Y set up a new factory in Penang to manufacture and sell integrated circuit 'Q50X-N'. The first quarter's budgeted production and sales were 2,000 units. The budgeted sales price and standard costs for 'Q50X-N' were as follows:

	RM	**RM**
Standard Sales Price *per unit*		50
Standard Costs *per unit*		
Circuit X (10 units @ RM 2.5)	25	
Circuit Designers (6 hrs. @ RM 2)	12	(37)
Standard Contribution *per unit*		13

Actual results for the first quarter were as follows:

	RM '000	**RM '000**
Sales (2,000 units)		158
Production Costs (2,000 units)		
Circuit X (21,600 units)	97.20	
Circuit Designers (11,600 hours)	34.80	(132)
Actual Contribution (2,000 units)		26

The management accountant made the following observations on the actual results–

"*In total, the performance agreed with budget; however, in every aspect other than volume, there were huge differences. Sales were made at what was supposed to be the highest feasible price, but we now feel that we could have sold for RM 82.50 with*

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no adverse effect on volume. The Circuit X cost that was anticipated at the time the budget was prepared was RM 2.5 per unit. However, the general market price relating to efficient purchases of the Circuit X during the quarter was RM 4.25 per unit. Circuit designers have the responsibility of designing electronic circuits that make up electrical systems. Circuit Designer's costs rose dramatically with increased demand for the specialist skills required to produce the 'Q50X-N', and the general market rate was RM 3.125 per hour - although Y always paid below the normal market rate whenever possible. In my opinion, it is not necessary to measure the first quarter's performance through variance analysis. Further, our operations are fully efficient as the final contribution is equal to the original budget."

Required

COMMENT on management accountant's view. ***(10 Marks)***

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