

MOCK TEST PAPER

FINAL (NEW): 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. **Krispy Meal** is a fast food joint operating in a very competitive business environment. It is a profitable business with very good prospects for growth. A strategy development meeting is underway to chalk out a plan to improve business growth in a very systematic measurable manner.

The following information is given to you:

Krispy Meal has the following mission statement “*Derive strength to grow in scale using our passion for the craft of cooking and service that will satisfy our customers, employees and other stakeholders.*” Krispy Meal is a closely held partnership firm with five partners. It started at a scale of operations that catered to the local demand within a locality. Reputation for good quality food and service has help it scale up its operations in the recent years. Most of the key decisions relating to operations like decision about the menu and its method of preparation, product pricing, finance, marketing, administration etc. are centralized. Skilled chefs, managers for various functions and the firm’s partners are part of this core team.

A general survey published in a food trade magazine highlighted people’s perception about fast food diet. Predominant opinion was that the current food platter available in food joints across the town were not healthy option. People want healthier choices in the menu when they dine out. At the same time, they do not want to compromise on taste or presentation of the food item. The other focal point for improvement was the order taking system. In most food joints, the current system is manual where the order taking staff note down a customer’s order on paper, send it to the kitchen and then delivers the order on intimation from the kitchen, which is also done manually by the kitchen staff. This system has problems like errors in taking down orders, most times delivery staff are unaware of the content in an item or its availability, delays in delivery leading to customers complaining about food served cold etc. This problem takes away the pleasure of dining out and is leaving customers dissatisfied. Another scope for improvement is that customers want more payment options other than cash to settle their bills. With the advent of plastic money and mobile e wallet payments carrying cash around has become cumbersome for most of them.

The partners have decided to use this as an opportunity to develop Krispy Meal as the niche food joint addressing the customer’s concerns, while managing to remain profitable. Consequently, Krispy Meal plans to expand by providing more choices along with its regular menu to health-conscious customers. Also, revamping its ordering, delivery and payment system would improve customer experience. A reasonable return at the overall firm level would be a return on equity (Net Income / Total Partnership Capital) of 25% each year. Capital structure will remain unchanged. The partners are not interested in diluting their share by bringing in new partners or take external funding with ownership stake. They may however utilize bank financing for expansion, but only if required.

Expansion of business will entail opening new branches in other localities as well as forging franchise with other stakeholders. However, Krispy Meal is not clear how to measure market share since the fast food industry market is not entirely an organized sector. There is no clear information about the overall revenue of the whole sector.

In the past, it was quality of its products that drove growth. The management wishes to maintain high quality standards across branches and franchisee. Therefore, an internal quality control department may be established to look into the same. External certifications from government food inspectors and other

recognized agencies would also be required to be met. Quality refers to both product quality and service quality, in this case, service being an inherent part of customer experience.

The staff at Krispy Meal are also excited at this opportunity. Expansion of the food joint would present a more dynamic work culture. Chefs would have the opportunity to enhance their skill by trying out various ways to cater to the consumer's palate. Ordering and delivery staff would have the opportunity to enhance their people management skills. This learning opportunity would definitely be an impetus for their career growth. With expansion chances of promotion within the organization increase. Financially, better business leads to the expectation of better pay and reward system.

Consequently, the management is intent on developing a performance management system that tracks performance across the organization. Among the different models, the Building Block Model is being considered.

Required

ADVISE the partners how the Building Block Model at Krispy Meal could be implemented. **(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 (₹'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. **History of the Company**

Star Bus Tours Co. Ltd. (SBTCL) is an open top double-decker bus sightseeing company, particularly identified with its special red and cream-colored buses. It commenced operating in small town of Meghalaya in June 2014 with four buses and as of 2018 operated over 44 buses in north east region of India. SBTCL operates five routes with stops at tourist destinations. The company runs hop-on, hop-off bus tours of various hills, with one 24-hour ticket valid for unlimited journeys on the route.

Budget Process/ Incentive Plan

As a part of management performance control and incentive scheme it has been following participative budgeting approach. In SBTCL, budgeting is a joint process in which functional divisions develop their plans in conformity with corporate goals for the next financial year. Based on these plans, divisions prepare functional budgets and send to the appropriate management for review and approval. The budgets after the incorporation of the feedback and suggestions received from the said management, are finalised for the implementation. Then, finalised budgets are used as yardstick for performance measurement. Comparing the actual performance with the yardstick, bonus and other performance

related incentives are considered. The higher management believe that this performance control and incentive scheme is very helpful to measure the performance and fixing responsibilities for the responsibility centres.

Budgeted Income Statement (Rs.'000)

Revenue	1,13,800
Less:	
Variable Costs-	
Direct Material (Fuel, Lubricants and Sundries)	13,600
Direct Labour	40,500
Variable Overheads	7,700
Fixed Costs-	
Operating Overheads (Buses, Garage, Salaries)	18,100
Marketing and Administration	10,700
Profit/ (Loss) before taxes	23,200

Tabel-1

Current Year's Income Statement (Rs.'000)

Revenue	93,500
Less:	
Variable Costs:	
Direct Material (Fuel, Lubricants, and Sundries)	19,600
Direct Labour	37,700
Variable Overheads	6,200
Fixed Costs:	
Operating Overheads (Buses, Garage, Salaries)	20,150
Marketing and Administration	10,100
Profit/ (Loss) before taxes	(250)

Tabel-2

Other Information

Surprisingly above given current year's actual results were not up to the mark. Actual results were clearly showing adverse performance in comparison with budgeted figures.

Managers of SBTCL were upset because they did not receive the bonus. Ms. Maggie, Tour Manager of Route No. 3, said –

"We lost 2 month's revenue and fuel prices are almost doubled. We did our best but these circumstances were beyond our control and we should not penalize at all."

In support of her statement, Ms. Meggie provided following additional information –

- (a) Rain is common in Northern Region. But, the past year set a record in numbers. In July, the expected average was 1,577 mm and received was 1,810 mm, In August the expected average rain was 990 mm and actual received was 1,535 mm. Heavy rain in these two months disrupted normal life of the region.

- (b) The fuel prices have risen almost continuously since last year due to surge in global crude prices.
- (c) Additional operational expenses Rs.22,00,000 also incurred to remove the milky appearance and give the stainless a nice new look effected by heavy rain.

She claimed that –

“Revised budget with consideration of the above factors would give different results and lead to different conclusions”

Required

ANALYSE the tour manager’s view. **(20 Marks)**

4. (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
<i>(for each unit two hours are required)</i>	
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) P Ltd. has two Divisions ‘Px’ and ‘Pz’ with full profit responsibility. The Division ‘Px’ produces Component ‘X’ which it sells to ‘outside’ customers only. The Division ‘Pz’ produces a product called the ‘Z’ which incorporates Component ‘X’ in its design. ‘Pz’ Division is currently purchasing required units of Component ‘X’ per year from an outside supplier at market price.

New CEO for Indian Operations has explored that ‘Px’ Division has enough capacity to meet entire requirements of Division ‘Pz’ and accordingly he requires internal transfer between the divisions at marginal cost from the overall company’s perspective.

Manager of Division ‘Px’ claims that transfer at marginal cost are unsuitable for performance evaluation since they don’t provide an incentive to the division to transfer goods internally. He stressed that transfer price should be ‘Cost plus a Mark-Up’.

New CEO worries that transfer price suggested by the manager of Division ‘Px’ will not induce managers of both Divisions to make optimum decisions.

Required

DISCUSS transfer pricing methods to overcome performance evaluation conflicts. **(10 Marks)**

5. (a) CNZ Ltd. is engaged in the manufacture of plastic bottles of a standard size and produced by a joint process of machines. The factory has 5 machines and capable of producing 40 bottles per hour. The variable cost per bottle is Rs. 0.32 and the selling price is Rs. 0.80 each. The company has received an offer from another company for manufacture of 40,000 units of a plastic moulded toy. The price per toy is Rs. 30 and the variable, cost is Rs.24 each. In case of the company takes up the job, it has to meet the expenses of making a special mould required for the manufacture of the toy. The cost of the mould is Rs.1,00,000. The company's time study analysis shows that the machines can produce only 16 toys per hour. The company has a total capacity of 10,000 hours during the period in which the toy is required to be manufactured. The fixed costs excluding the cost of construction of the mould during the period will be Rs.10 Lakh.

The company has an order for the supply of 3,00,000 bottles during the period.

Required

- (i) Do you ADVISE the company to take up the order for manufacturing plastic moulded toys during the time when it has an order in its book for the supply of 3,00,000 bottles. **(3 Marks)**
- (ii) If the order for the supply of bottles increases to 4,00,000 bottles, will you ADVISE the company to accept the order for the supply of plastic moulded toys? State the reasons. **(3 Marks)**
- (iii) An associate company of CNZ Ltd. has idle capacity and is willing to take up the whole or part of the manufacturing of the plastic moulded toys on sub-contracting basis. The subcontract price inclusive of the cost of construction of mould is Rs. 28 per toy. DETERMINE the minimum expected excess machine hour capacity needed to justify producing any portion of the toy order by the company itself rather than subcontracting. **(4 Marks)**
- (b) You are a paid assistant working in SBC LLP – an accounts consultancy firm. You have received the following email from one of SBC's senior partner:

To: DG

From: SB

Date: 22/06/20XX

Subject: PEL meeting this afternoon

As you are probably aware, we are meeting with the managers of PEL later this afternoon to discuss several key issues, and I need you to do some research for me. I need a report that covers the following:

Analysis of the new proposal for the period 2017 to 2019 based on

- external effectiveness and
- internal efficiency

To help you with this, I've attached a copy of our forecast of PEL's financial and non-financial data for the period 2017 to 2019. Please read it carefully and email me back as soon as possible so I have time to prepare before the meeting.

Thanks

SB

-----Attachment-----

Background to PEL

Precision Engineering Ltd (PEL) specialises in engineering design and manufacture in the automotive and motorsport industry. PEL's design team has many years' experience in the design and development of engine components for the market and high performance engines. PEL has

identified a number of key competitors and intends to emphasis on close co-operation with its customers in providing products to meet their specific engineering design and quality requirements. Efforts will be made to improve the effectiveness of all aspects of the cycle, from product design to after-sales service to customers. This will require data from a number of departments in the achievement of the specific goals of the new proposal. Efforts will be made to improve productivity in conjunction with increased flexibility of methods.

Forecast of PEL's Financial and Non-Financial Data

Particulars	2017	2018	2019
Total Market Size (Rs.lacs)	110	115	120
PEL Sales (Rs.lacs)	18	21	23
PEL Total Costs (Rs.lacs)	14.10	12.72	12.55
Production Achieving Design Quality Standards	95.5%	98.0%	98.5%
Returns from Customers (% of Deliveries)	2.0%	1.0%	0.5%
Cost of After-Sales Service (Rs.lacs)	1.3	1.1	1.0
Sales Meeting Planned Delivery Dates	85%	90%	95%
Average Cycle Time (Customer Enquiry to Delivery) (weeks)	5.0	4.5	4.0
Components Scrapped in Production (%)	6.5%	4.0%	1.5%
Idle Machine Capacity (%)	9%	5%	1%

Required

Draft the email as requested by the partner.

(10 Marks)

6. (a) Following three independent situations pertaining to environmental management and sustainability are provided to you:

Situation I

Wasco Limited is a chemical company which uses chloro-fluorocarbons (CFC) in the production of chemical. As awareness of the environmental damage caused by CFC spread, Wasco Limited stopped using CFC in its production processes and analysed and redesigned its product range much before the legislation controlling use of CFC introduced by the Government.

Situation II

Energy drink manufacturer Cool Limited was ordered to submit a yearly report to the Ministry of Environment and Forests on activities, which contains information concerning collection, recovery and recycling of packaging waste, fulfilment of the targets, volume of recovered and recycled packaging waste by type of material and declaration that all compulsory contributions and taxes have been paid.

Situation III

KOA Limited has achieved a 25% reduction of energy consumption through its "Go Renewable" initiative. For, the company a 25% reduction represents a cost saving of about Rs. 30,00,000/-.

Required

Read the above three situations and EXPLAIN **any 2 items** from (i), (ii) and (iii) below:

- (i) Why Wasco Limited stopped using CFC and redesigned its product range much before legislation introduced by Government? **(5 Marks)**

- (ii) The risk exposure of Cool Limited. **(5 Marks)**
- (iii) How focusing on environmental sustainability provides opportunity to KOA Limited for reducing costs? **(5 Marks)**
- (b) LNG Limited has three divisions. Its desired rate of return is 14%. The operating assets and income for each division are as follows:

Divisions	Operating Assets (Rs.)	Operating Income (Rs.)
L	19,20,000	3,45,600
N	10,50,000	1,73,250
G	12,30,000	1,67,280
Total	42,00,000	6,86,130

LNG limited has Rs. 8,00,000 of additional cash to invest in one of its divisions. The divisional managers have identified investment opportunities that are expected to yield the following ROIs

Divisions	Expected ROIs for additional investment
L	16%
N	12%
G	15%

Required

- (i) CALCULATE ROIs at present for each division and STATE which division manager is currently providing the highest ROI. **(3 Marks)**
- (ii) Based on ROI, IDENTIFY the division manager who would be the most eager to accept the additional investment funds. **(1 Mark)**
- (iii) Based on ROI, IDENTIFY the division manager who would be least eager to accept the additional investment funds. **(1 Mark)**
- (iv) STATE the division that offers the best investment opportunity for LNG limited. **(1Mark)**
- (v) DISCUSS the conflict between requirements (ii) and (iv) above. **(2 Marks)**
- (vi) ADVISE how the residual income performance measure could be used to motivate the managers to act in the best interest of the company. **(2 Marks)**