

**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. KTR 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:

KTR 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.*” KTR 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 KTR as the niche food joint addressing the customer’s concerns, while managing to remain profitable. Consequently, KTR 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, KTR 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 KTR 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 KTR could be implemented. **(20 Marks)**

2. A & T International Ltd. (ATIL) has developed a new product 'α<sup>3</sup>' which is about to be launched into the market. Company has spent ₹30,00,000 on R&D of product 'α<sup>3</sup>'. It has also bought a machine to produce the product 'α<sup>3</sup>' costing ₹11,25,000 with a capacity of producing 1,100 units per week. Machine has no residual value.

The company has decided to charge price that will change with the cumulative numbers of units sold:

Cumulative Sales (units)	Selling Price ₹ per unit
0 to 2,200	750
2,201 to 7,700	600
7,701 to 15,950	525
15,951 to 59,950	450
59,951 and above	300

Based on these selling prices, it is expected that sales demand will be as shown below:

Weeks	Sales Demand per week (units)
1-10	220
11-20	550
21-30	825
31-70	1,100
71-80	880
81-90	660
91-100	440
101-110	220
Thereafter	NIL

Unit variable costs are expected to be as follows:

₹ per unit	
First 2,200 units	375
Next 13,750 units	300
Next 22,000 units	225
Next 22,000 units	188
Thereafter	225

ATIL uses just-in-time production system. Following is the total contribution statement of the product 'α<sup>3</sup>' for its Introduction and Growth stage:

	Introduction	Growth	
Weeks	1 - 10	11 - 30	
Number of units Produced and Sold	2,200	5,500	8,250
Selling Price per unit (₹)	750	600	525
Variable Cost per unit (₹)	375	300	300
Contribution per unit (₹)	375	300	225
Total Contribution (₹)	8,25,000	16,50,000	18,56,250

**Required**

- PREPARE the total contribution statement for each of the remaining two stages of the product's life cycle. **(4 Marks)**
- DISCUSS Pricing Strategy of the product 'α<sup>3</sup>'. **(6 Marks)**
- ANALYSE possible reasons for the changes in cost during the life cycle of the product 'α<sup>3</sup>'. **(10 Marks)**

Note: Ignore the time value of money.

- West Coast community operates Homelessness Services (HS) on a not-for-profit basis as a local solution to local housing needs. The primary objective is to meet the accommodation needs of persons within its locality targeting those living in the low/middle income groups and senior citizens. Accommodation is basically furnished; it consists of a small house, with kitchen, bathroom, bedroom/(s), and a sitting room. HS manages 450 such houses across various localities. Exclusive Services (ES) is a profit-seeking organisation which provides rented accommodation to the public. ES manages 200 such houses across localities similar to HS' operations.

Income and Expenditure accounts for the year ended 31<sup>st</sup> March 2018 were as follows:

	HS (₹)	ES (₹)
Rent Received	1,02,98,600	1,09,98,000
Less:		
Employee Costs	24,00,000	38,00,000
Planned Maintenance and Substantial Repairs	34,19,500	10,41,000
Running Repairs	23,91,600	6,38,000

Miscellaneous Operating Costs	15,27,500	11,75,000
Insurance, Property Taxes, and Interest etc.	13,15,500	18,75,000
Operating (Deficit)/ Surplus	(7,55,500)	24,69,000

**Operating Information** in respect of the year ended 31<sup>st</sup> March 2018 was as follows:

House and rental information:

Size of House	Number of Houses		Rent per Week (₹)	
	HS	ES	HS	ES
1 Bedroom +	40	20	400	750
2 Bedrooms +	80	40	450	800
3 Bedrooms +	250	140	500	1,175
4 Bedrooms +	80	Nil	700	N.A.

HS had certain houses that were unoccupied during part of the year. The rents lost as a consequence of unoccupied properties amounted to ₹18,17,400. ES did not have any unoccupied houses at any time during the year.

Employees were paid as follows:

Number of Staff		Salary per Staff Member (₹) per annum	
HS	ES	HS	ES
1	2	3,00,000	5,00,000
2	2	2,50,000	3,00,000
4	11	2,00,000	2,00,000
8	-	1,00,000	-

Planned maintenance and substantial repairs undertaken:

Nature of Work	Number of Houses		Cost per House (₹)	
	HS	ES	HS	ES
Miscellaneous Building Work	10	-	12,500	-
Sanitary Fittings (Kitchen + Bathroom) [all are the same size]	45	5	26,100	52,200
AC Upgrades/ Replacements	8	-	15,000	-
Replacement of Wooden Structure for 3-Bedroomed Houses	50	13	40,000	60,000

Running Repairs Information:

Classification of Repair	Number of Repair Undertaken		Total Cost (₹)
	HS	ES	HS
Emergency	480	160	6,72,000
Urgent	990	376	11,28,000
Non-urgent	560	102	5,91,600

Each repair undertaken by ES costs the same irrespective of the classification of repair.

**Required**

- (i) Critically EVALUATE how the management of Homelessness Services could measure the 'Value for Money' of its service provision during the year ended 31 March 2018. **(10 Marks)**
  - (ii) IDENTIFY, 2 performance measures in relation to Flexibility and Service Quality (dimensions of performance measurement). **(4 Marks)**
  - (iii) ANALYSE, 3 performance measures relating to 'Cost and Efficiency' that could be utilised by the management of Homelessness Services when comparing its operating performance against that achieved by Exclusive Services. **(6 Marks)**
4. (a) SB is a government-owned bank. The Bank has over 2,500 branches in country 'A' spread over all states/union territories including specialized branches. These branches are controlled through 27 Zonal Offices and 4 NBG Offices. As a government owned bank it has usually been the first preference for customers while choosing a bank. In the last six years, the Government has permitted a number of foreign banks to operate within the country in order to solve the problem of foreign exchange shortage and open up foreign trade as an instrument to promote economic development. These foreign banks offer diverse range of services such as direct access to executive management, a single point of contact to coordinate all banking needs, appointment banking to save time, free online banking services 24/7, free unlimited ATM access etc. In contrast, SB has very elementary information systems, covering only for internal transaction handling and accounting activities. Customers have to visit banks to carry out transactions like - checking bank balance, cash deposit and withdrawals, transferring money from one account to another in operational hours. Often customers complain about the amount of time as the employees and clerical staff of the bank can attend only few customers at a time. Customer service evaluation has never been undertaken by SB. Other processes, new account applications, are complex, requiring completion of many documents formalities. Board of Directors were worried from growing popularity of new style banks. The Board of Directors of SB has recently held meeting to discuss the shortfalls in its current services and the need to re-engineer the SB's business processes.

**Required**

ADVISE how Business Process Reengineering (BPR) can be used to improve SB's current processes. **(10 Marks)**

- (b) SPM, a leading school of management in the heart of India's financial centre of Mumbai, preparing its budget for 2018. 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 SPM board blasted the director over the lack of participation of his senior staff in the budget process for 2017 and requested that for the 2018 budget the senior staff were to be involved.

**Required**

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

5. (a) Recently, Ministry of Health and Family Welfare along with Drug Control Department have come hard on health care centres for charging exorbitant fees from their patients. Pacific Health Care Ltd. (PHCL), a leading integrated healthcare delivery provider company is feeling pinch of measures taken by authorities and facing margin pressures due to this. PHCL is operating in a competitive environment so; it's difficult to increase patient numbers also. Management Consultant of the company has come out with some plan for cost control and reduction.

PHCL provides treatment under package system where fees is charged irrespective of days a patient stays in the hospital. Consultant has estimated 2.50 patient days per patient. He wants to

reduce it to 2 days. By doing this, consultant has targeted the general variable cost of ₹ 500 per patient day. Annually 15,000 patients visit to the hospital for treatment.

Medical Superintendent has some concerns with that of Consultant's plan. According to him, reducing the patient stay would be detrimental to the full recovery of patient. They would come again for admission thereby increasing current readmission rate from 3% to 5%; it means readmitting 300 additional patients per year. Company has to spend ₹ 25,00,000 more to accommodate this increase in readmission. But Consultant has found blessing in disguise in this. He said every readmission is treated as new admission so it would result in additional cash flow of ₹ 4,500 per patient in the form of admission fees.

**Required**

EVALUATE the Management Consultant's plan.

**(10 Marks)**

- (b) AEG has two Divisions 'E' and 'G' with full profit responsibility. The Division 'E' produces Component 'e' which it sells to 'outside' customers only. The Division 'G' produces a product called the 'g' which incorporates Component 'e' in its design. 'G' Division is currently purchasing required units of Component 'e' per year from an outside supplier at market price.

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

Manager of Division 'E' 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 'E' will not induce managers of both Divisions to make optimum decisions.

**Required**

DISCUSS transfer pricing methods to overcome performance evaluation conflicts.

**(10 Marks)**

6. (a) The budgeted cost data of a product manufactured by Ayudhya Ltd. is furnished as below:

Budgeted units to be produced	2,00,000
Variable cost (₹)	32 per unit
Fixed cost (₹)	16 lacs

It is proposed to adopt cost plus pricing approach with a mark-up of 25% on full budgeted cost basis.

However, research by the marketing department indicates that demand of the product in the market is price sensitive. The likely market responses are as follows:

Selling Price (₹ per unit)	44	48	50	56	60
Annual Demand (units)	1,68,000	1,52,000	1,40,000	1,28,000	1,08,000

**Required**

ANALYSE the above situation and DETERMINE the best course of action.

**(10 Marks)**

- (b) T-tech is a Taiwan based firm, that designs, develops, and sells audio equipment. Founded in 1975 by Mr. Boss, firm sells its products throughout the world. T-tech is best known for its home audio systems and speakers, noise cancelling headphones, professional audio systems and automobile sound systems. Extracts from the budget are shown in the following table:

**Home Audio System Division**  
**Jan'2018**

<b>System</b>	<b>Sales (units)</b>	<b>Selling Price ₹</b>	<b>Standard Cost (per System) ₹</b>
3,000 W PMPO	1,500	18,750	12,500
5,000 W PMPO	500	50,000	26,250

The Managing Director has sent you a copy of an email he received from the Sales Manager 'K'. The content of the email was as follows:

"We have had an outstanding month. There was an adverse Sales Price Variance on the 3,000 W PMPO Systems of ₹22,50,000 but I compensated for that by raising the price of 5,000 W PMPO Systems. Unit sales of 3,000 W PMPO Systems were as expected but sales of the 5,000 W PMPOs were exceptional and gave a Sales Margin Volume Variance of ₹23,75,000. I think I deserve a bonus!"

The managing Director has asked for your opinion on these figures. You got the following information:

Actual results for Jan' 2018 were:

<b>System</b>	<b>Sales (units)</b>	<b>Selling Price ₹</b>
3,000 W PMPO	1,500	₹ 17,250
5,000 W PMPO	600	₹ 53,750

The total market demand for 3,000 W PMPO Systems was as budgeted but as a result of suppliers reducing the price of supporting UHD TV System the total market for 5,000 W PMPO Systems raised by 50% in Jan'2018.

The company had sufficient capacity to meet the revised market demand for 750 units of its 5,000 W PMPO Systems and therefore maintained its market share.

**Required**

- (i) CALCULATE the following Operational Variances based on the revised market details:
  - Sales Margin Mix Variance
  - Sales Margin Volume Variance. **(4 Marks)**
- (ii) COMMENT briefly on the measurement of the K's performance. **(6 Marks)**