# **PAPER – 17 – STRATEGIC PERFORMANCE MANAGEMENT (SPM)**

The following table lists the learning objectives and the verbs that appear in the syllabus learning aims and examination questions:

	Learning objectives	Verbs used	Definition
	KNOWLEDGE	List	Make a list of
	What you are expected to	State	Express, fully or clearly, the details/facts
	know	Define	Give the exact meaning of
		Describe	Communicate the key features of
		Distinguish	Highlight the differences between
	COMPREHENSION	Fxplain	Make clear or intelligible/ state the
		- 1	meaning or purpose of
	What you are expected to understand	Identity	Recognize, establish or select after consideration
		Illustrate	Use an example to describe or
		Apply	Put to practical use
		Calculate	Ascertain or reckon
		Culculule	mathematically
	APPLICATION	Demonstrate	Prove with certainty or exhibit by
		Demonstrate	practical means
	How you are expected to	Prepare	Make or get ready for use
	apply	Reconcile	Make or prove consistent/
	your knowledge		compatible
Ö		Solve	Find an answer to
EL (		Tabulate	Arrange in a table
LEV		Analyse	Examine in detail the structure of
_	2124 14 14	Categorise	Place into a defined class or division
	7 (14) (215)5	Compare	Show the similarities and/or
	How you are expected to	and contrast	differences between
	analyse the detail of what you	Construct	Build up or compile
	have learned	Priorities	Place in order of priority or
			sequence for action
		Produce	Create or bring into existence
	SYNTHESIS	Discuss	Examine in detail by argument
	How you are expected to		
	utilize the information	Interpret	Translate into intelliaible or familiar
	gathered to reach an	·	terms
	optimum		
	conclusion by a process of	Decide	To solve or conclude
	reasoning		
	EVALUATION	Advise	Counsel, inform or notify
	How you are expected to use	Evaluate	Appraise or asses the value of
	your learning to evaluate, make decisions or	Recommend	Propose a course of action
	recommendations		

## Paper – 17 – Strategic Performance Management

Full Marks: 100

Time Allowed: 3 hours

This paper contains 10 questions, divided in three sections Section A, Section B and Section C. In total 7 questions are to be answered.

From Section A, Question No. 1 is compulsory and answer any two questions from Section A (out of three questions – Questions Nos. 2 to 4). From Section B, Answer any two questions (i.e. out of Question Nos. 5 to 7). From Section C, Answer any two questions (i.e., out of Question Nos. 8 to 10).

Students are requested to read the instructions against each individual question also. All workings must form part of your answer. Assumptions, if any, must be clearly indicated.

#### Section – A

#### [Question No. 1 is compulsory and answers any 2 from the rest]

1. The Universal Health System (UHS) provides the entire healthcare service to residents in Illopia. The UHS is funded centrally through revenues from taxpayers. However, the government is not involved in the day-to-day running of the UHS, which is largely managed regionally by a number of self-governing trusts, such as the Sickham UHS Trust.

The Sickham UHS Trust runs one hospital in Sickham and, like other trusts in Illopia, receives 70% of its income largely from the UHS' 'payments by results' scheme, which was established two years ago. Under this scheme, the trust receives a pre-set tariff (fee income) for each service it provides. If the Trust manages to provide any of its services at a lower cost than the pre-set tariff, it is allowed to use the surplus as it wishes. Similarly, it has to bear the cost of any deficits itself. Currently, the Trust knows that a number of its services simply cannot be provided at the tariff paid and accepts that these always lead to a deficit. Similarly, other services and account for overheads differently. Also, it is partly due to regional differences in costs, which are not taken into account by the scheme, which operates on the basis that 'one tariff fits all'.

The remaining 30% of the Trust's income comes from transplant and heart operations. Since these are not covered by the scheme, the payment the Trust receives is based on the actual costs it incurs in providing the operations. However, the Trust is not allowed to exceed the total budget provided for these operations in any one year.

Over recent years, the Trust's board of directors has become increasingly dissatisfied with the financial performance of the Trust and has blamed it on poor costing systems, leading to an inability to control costs. As a result, the finance director and his second in command – the financial controller – have now been replaced. The board of directors has taken this decision after complaining that 'the Trust simply cannot sustain the big deficit between income and spending'. The new financial controller comes from a manufacturing background and is a great advocate of target costing, believing that the introduction of a target costing system at the Sickham UHS Trust is the answer to all of its problems. The new financial director is unconvinced, believing target costing to be only really suitable in manufacturing companies.

Required:

- (a) Explain the main steps involved in developing a target price and target cost for a product in a typical manufacturing company.[6]
- (b) Explain four key characteristics that distinguish services from manufacturing. [4]
- (c) Describe how the Sickham UHS Trust is likely, in the current circumstances, to try to derive:

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- (i) a target cost for the services that it provides under the 'payment by results' scheme; and [2] [2]
- (ii) a target cost for transplants and heart operations.
- (d) Discuss THREE of the particular difficulties that the Sickham UHS Trust may find in using target costing in its service provision. [6]
- 2. (a) Startup Ltd. Provides the following details on its new product. Years 1 and 2: R&D Costs: ₹ 2,40,000, Design Costs ₹ 1,60,000 Years 3 to 6: Other Functional Costs:

Function	One-Time Costs	Costs per unit
Production	₹1,00,000	₹25
Marketing	₹ 70,000	₹24
Distribution	₹ 50,000	₹16
Customer Service	₹ 80,000	₹ 30

The sale quantities during the Product Life Cycle at various Selling Prices are:

Selling Price per unit (₹)	400	480	600
Sale Quantity in units	5,000	4,000	2,500

Ignoring time value of money, compute the Net Incomes generated over the Product Life Cycle at various prices. Which price should the Company select? [9+1]

2. (b) You are the Manager of XYZ Paper Mills and have recently come across a particular type of paper, which is being sold at a substantially lower rate (by another Company ABC Ltd.) than the price charged by your own mill. The Value Chain for one use of tonne of such paper for ABC Ltd. is: ABC Ltd.  $\rightarrow$  Merchant  $\rightarrow$  Printer  $\rightarrow$  Customer.

ABC Ltd sells this particular paper to Merchant at the rate of ₹ 1,466 per Tonne. ABC Ltd pays for the Freight which amounts to ₹ 30 per Tonne. Average Returns and Allowances amount to 4% of Sales and approximately equals ₹ 60 per Tonne.

The Value Chain of your Company, through which the paper reaches the ultimate customer is similar to that of ABC Ltd. However, your Mill does not sell directly to the Merchant, the latter receiving the paper from huge Distribution Centre maintained by your Company at Haryana. Shipment Costs from the Mill to the Distribution Centre is ₹ 11 per Tonne while the Operating Costs in the Distribution Center are estimated at ₹ 25 per Tonne. The Return on Investment required by the Distribution Centre for the investments made, amount to an estimate ₹ 58 per Tonne.

Calculate the "Mill Manufacturing Target Cost" for this particular paper for XYZ Ltd. Assume that the return on the investment expected by XYZ Ltd is ₹ 120 per tonne of paper. [5]

2. (c) "In strategic business environment, strategic managers face different circumstances in their business and have to understand the different environmental influence of business." – Justify the statement. [5]

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**3.** (a) AB Ltd. Manufactures foam, carpets and upholstery in its three divisions. Its operating statement for 2015-16 showing the performance of these divisions drawn for the use of management is reproduced below:

				(₹ '000)
Particulars	Manufacturing Divisions		Total	
	Foam	Carpets	Upholstery	
Sales revenue	1,600 (A)	1,200	1,200	4,000
Manufacturing Costs:				
Variable	1,200	700	680	2,580
Fixed (Traceable)		100	20	120
	1,200	800	700	2,700
Gross profit	400	400	500	1,300
Expenses:				
Administration	134	116	172	422
Selling	202	210	232	644
	336	316	404	1,066 (B)
Net Income	64	74	96	234
Division's Ranking	3rd	2 <sup>nd</sup>	] st	

- (A) Sales include foam transferred to the Upholstery Division at its manufacturing cost ₹ 2,00,000.
- (B) Common expenses of ₹ 1,30,000 and ₹ 1,00,000 on account of administration and selling respectively stand apportioned to these divisions at 10% of Gross profit in case of administration and 2.5% of sales in case of selling expenses. Rest of ₹ 8,36,000 of the expenses are traceable to respective divisions.

The Manager of the Foam Division is not satisfied with the above approach of presenting operating performance. In this opinion his division is best among all the divisions. He requests the management for preparation of revised operating statement using contribution approach and showing internal transfer at market price.

You are required to:

- (i) Draw the revised operating statement using contribution approach and pricing the internal transfer at market price.
- (ii) Compute relevant ratios to show comparative profitability of these divisions and rank them in the light of your answer at (i) above. Further, offer your comments on the contention of the Manager of Foam Division.
- (iii) State why the contribution approach and pricing of internal transfer at market price are more appropriate in realistic assessment of the performance of various divisions.
  [8+5+2]
- 3. (b) List the factors influencing price of a product.

[5]

4. (a) In the HiChem Company, the Research and Development decisions are considered to be at par with investment decisions. The company is faced with the problem of deciding on a project that would place it better in relation to its competitors. Looking to its technical ability, the company is not sure whether the project would ultimately be successful.

The R and D manager feels that there is a sixty per cent chance that the project shall be completed in the next two years. If the period of two years is exceeded, the firm shall have to incur extra costs and it shall lose market opportunities. It is estimated that a total of  $\mathfrak{F}$  1 lac will be spent in the two-yearly period on this research project and the chances of its successful completion in this period are reckoned to be even. If developed successfully, the likely pay-offs are : a 0.5 chance of  $\mathfrak{F}$  2,40,000, a 0.3 chance of  $\mathfrak{F}$  1,40,000, and a 0.2 chance of  $\mathfrak{F}$  40,000.

If, on the other hand, the project cannot be completed successfully in the span of two years, an additional 25,000 rupees would be spent in the third year in the expectation that it would be successfully completed in this year. The chances of a successful completion in the third year are taken to be forty per cent and this would imply the following returns: ₹ 2,00,000 with a 0.2 chance, ₹ 1,00,000 with a 0.4 chance, and ₹ 40,000 with a 0.4 chance. In case the project is unsuccessful after 3 years as well, it is thought proper to abandon it rather than carry it further on. Assume that in case the project is to be abandoned at any stage, the success, if any, of the company's competitors, in successfully developing such a project shall not be taken as a loss to this company. Further assume that the time value of money is nil.

(i) Construct the decision tree facing the company.

(ii)	Analyse the tree and	determine the optimal decision.	[4+6]

- 4. (b) Discuss the role of the Management Accountant competitive intelligence. [5]
- 4. (c) Describe the difficulties in using and interpreting qualitative information. [5]

#### Section – B

### [Answers any 2 questions from this section]

5.	<ul> <li>Define the following terms in the context of Supply chain Management:</li> <li>(a) Capacity Strategy,</li> <li>(b) Lead Time / Cycle Time,</li> <li>(c) Preventative Maintenance,</li> <li>(d) Specifications.</li> </ul>	[2.5 x4]
6.	(a) State the Technological and Operational factors of E-commerce.	[6]
6.	(b) Discuss about the Data Availability.	[4]
7.	(a) Describe about the different types of On-Line Analytical Processing.	[5]
7.	(b) Describe about the Long Short Term Memory of Recurrent Artificial Neural Topologies.	Networks [5]

## Section C

## [Answer any 2 questions from this section]

8.	Discuss about the Probability of Ruin and Risk Pooling.	[6+4]
9.	(a) Describe the Performance-Related measures in the context of Management.	Corporate Risk [6]
9.	(b) Explain about the Exchange Rate Risk and Liquidity Risk.	[2+2]
10.	. Discuss Altman's Model and Explain the Five Z – Score Constituent Ratios.	[10]