Paper 9 – OPERATIONS MANAGEMENT
&
STRATEGIC MANAGEMENT

Paper 9- OPERATIONS MANAGEMENT & STRATEGIC MANAGEMENT

Full Marks: 100 **Time allowed: 3 hours**

The figures in the margin on the right side indicate full marks.
This question paper has two sections.
Both the sections are to be answered subject to instructions given against each.

Section – A

1. (a) Choose the correct answer: **[1x10=10]**

(i) The method used in scheduling a project is :
- **(a) A schedule of break-down of orders**
- **(b) Outline master programme**
- **(c) PERT & CPM**
- **(d) Schedule for large and integrated work.**

(ii) MRP stands for :
- **(a) Material requirement planning**
- **(b) Material reordering planning**
- **(c) Material requisition procedure**
- **(d) Material recording procedure**

(iii) Conversion of inputs into outputs is known as :
- **(a) Application of technology**
- **(b) Operations management**
- **(c) Manufacturing products**
- **(d) Product**

(iv) Long range forecasting is useful in :
- **(a) plan for research and development**
- **(b) to schedule jobs in job production**
- **(c) in purchasing the material to meet the present production demand**
- **(d) to access man power required in the coming month**

(v) JIT stands for :
- **(a) Just in time purchase**
- **(b) Just in time production**
- **(c) Just in time use of materials**
- **(d) Just in time order the material**

(vi) The act of releasing the production documents to production department is known as :
- **(a) Routine**
- **(b) Scheduling**
- **(c) Expediting**
- **(d) Dispatching**

(vii) Addition of value to raw materials through application of technology is :
- **(a) Product**
- **(b) Production**
- **(c) Advancement**
- **(d) Transformation**

(viii) Arrangement of machines depending on sequence of operations happens in :
- **(a) Process Layout**
- **(b) Product Layout**
- **(c) Hybrid Layout**
- **(d) Group Technology Layout**

(ix) The aims at finding the best and most efficient way of using the available resources-men, materials, money and machinery :
- **(a) Time Study**
- **(b) Work Study**
- **(c) Method Study**
- **(d) Job Evaluation**

(x) Most suitable layout for continuous production is :
- **(a) Line layout**
- **(b) Process layout**
- **(c) Group technology**
- **(d) Matrix layout**

(b) Match the products in column-I with production centers in column –II [1x6=6]

I	II
1. Electricity	**(a) Blast Furnace**
2. Petrol	**(b) Generator**
3. Iron	**(c) Refinery**
4. Cloth	**(d) assembly Line**
5. Car	**(e)Smithy**
6. Cotton Yarn	**(f) Spinning Mill**
7. Forgings	**(g) Power Loom**

(c) State whether the following statements are True or False: [1x6=6]

(i) General purpose machine are less prone to obsolescence ( )
(ii) It is desirable to conduct work measurement after method study ( )
(iii) Increase in productivity leads to retrenchment of work force ( )
(iv) Increased productivity leads to cost reduction ( )
(v) Activity sampling is not a technique of Job Evaluation ( )
(vi) Production planning and control is essentially concerned with the control of Finished goods ( )

Answer

1. (a) (i) (c)
(ii) (a)
(iii) (c)
(iv) (a)
(v) (b)
(vi) (d)
(vii) (b)
(viii) (b)
(xi) (b)
(x) (a)

(b)

I	II
1. Electricity	(b) Generator
2. Petrol	(c) Refinery
3. Iron	(a) Blast Furnace
4. Cloth	(g) Power Loom
5. Car	(d) assembly Line
6. Cotton Yarn	(f) Spinning Mill
7. Forgings	(e)Smithy

(c) (i) (T)
(ii) (T)
(iii) (F)
(iv) (T)
(v) (T)
(vi) (F)

Answer any three questions from the following: **[3x16=48]**

2. (a) What are the characteristics of modern operation function? **[8]**

(b) With the help of following data project the trend of sales for the next five years:

Years	2002	2003	2004	2005	2006	2007
Sales (in lakhs)	100	110	115	120	135	140

[8]

Answer:

2. (a) **Characteristics of Modern Operation Function:**
The production management of today presents certain characteristics which make it look totally different from what it was during the past. Specifically, today's production system is characterised by at least four features.

1. Manufacturing as Competitive Advantage
In the past production was considered to be like any other function in the organisation. Where demand was high and production capacities were inadequate, the concern was to somehow muster all inputs and use them to produce goods which would be grabbed by market. But today's scenario is contrasting. Plants have excess capacities, competition is mounting and firms look and gain competitive advantage to survive and succeed. Interestingly, production system offers vast scope to gain competitive edge and firms intend to exploit the potential. Total Quality Management (TQM), Time-Based Competition, Business Process Re-engineering (BPRE), Just-in-Time (JIT), Focused Factory, Flexible Manufacturing Systems (FMS), Computer Integrated Manufacturing (CIM), and The Virtual Corporation are but only some techniques which the companies are employing to gain competitive advantage.

2. Services Orientation
As was stated earlier, service sector is gaining greater relevance these days. The production system, therefore, needs to be organised keeping in mind the peculiar requirements of the service component. The entire manufacturing needs to be geared to serve (i) intangible and perishable nature of the services, (ii) constant interaction with clients or customers, (iii) small volumes of production to serve local markets, and (iv)need to locate facilities to serve local markets. There is increased presence of professionals on the production, instead of technicians and engineers.

3. Disappearance of Smokestacks
Protective labour legislation, environmental movement and gradual emergence of knowledge based organisations have brought total transformation in the production system. Today's factories are aesthetically designed and built, environment friendly - in fact, they are homes away from homes. Going to factory everyday is no more excruciating experience, it is like holidaying at a scenic spot. A visit to ABB, L & T or Smith Kline and Beecham should convince the reader about the transformation that has taken place in the wealth creation system.

4. Small has Become Beautiful

It was E.F. Schumacher who, in his famous book *Small is Beautiful*, opposed giant organisations and increased specialisation. He advocated, instead, intermediate technology based on smaller working units, community ownership, and regional workplaces utilising local labour and resources. For him, small was beautiful. Businessmen, all over the world, did not believe in Schumacher's philosophy. Inspired by economies of scale, industrialists went In for huge organisations and mass production systems.

(b) **Computation of trend values of sales**

Year	Time deviations from the middle of 2004 and 2005 assuring 5 years = 1	Sales (in lakh ₹)	Squares of time deviation	Product of time deviation and sales
	X	Y	X^2	XY
2002	-5	100	25	-500
2003	-3	110	9	-330
2004	-1	115	1	-115
2005	+1	120	1	+120
2006	+3	135	9	+405
2007	+ 5	140	25	+700
n = 6	ΣX = 0	ΣY = 720	$\Sigma X^2 = 70$	ΣXY = 280

Regression equation of Y on X:

$Y = a + bX$

To find the values of a and b

$$a = \frac{\sum Y}{n} = \frac{720}{6} = 120$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{280}{70} = 4$$

Sales forecast for the next years, i.e., 2008 to 2012

Y_{2008} = 120 + 4 (+7) = 120 + 28 = ₹ 148 lakhs

Y_{2009} = 120 + 4 (+9) = 120 + 36 = ₹ 156 lakhs

Y_{2010} = 120 + 4 (+11) = 120 + 44 = ₹ 164 lakhs.

Y_{2011} = 120 + 4 (+13) = 120 + 52 = ₹ 172 lakhs.

Y_{2012} = 120 + 4 (+15) = 120 + 60 = ₹ 180 lakhs.

3. (a) Mention any six characteristics of a good Product Design. [3+7=10]

(b) The following data is available for a manufacturing unit:

No. of operators	**15**
Daily working hours	**8**
No. of days per months	**25**
Std. production per month	**300 units**
Std. labour hours per unit	**8**

The following information was obtained for November 2015:

Man days lost due to absenteeism	**30**
Unit produced	**240**
Idle Time	**276 man hours**

Find the following:-

(i) Percent absenteeism

(ii) Efficiency of utilization of labour

(iii) Productive efficiency of labour

(iv) Overall productivity of labour in terms of units produced per man per month. [6]

Answer:

3. (a) A good product design must ensure the following:

(i) Function or performance: The function or performance is what the customer expects the product to do to solve his/her problem or offer certain benefits leading to satisfaction. For example, a customer for a motor bike expects the bike to start with a few kicks on the kick peddle and also expects some other functional aspects such as pick-up, maximum speed, engine power and fuel consumption etc.

(ii) Appearance or aesthetics: This includes the style, colour, look, feel, etc. which appeals to the human sense and adds value to the product.

(iii) Reliability: This refers to the length of time a product can be used before it fails. In other words, reliability is the probability that a product will function for a specific time period without failure.

(iv) Maintainability: Refers to the restoration of a product once it has failed. High degree of maintainability is desired so that the product can be restored (repaired) to be used within a short time after it breaks down. This is also known as serviceability.

(v) Availability: This refers to the continuity of service to the customer. A product is available for use when it is in an operational state. Availability is a combination of reliability and maintainability. High reliability and maintainability ensures high availability.

(vi) Productibility: This refers to the ease of manufacture with minimum cost (economic production). This is ensured in product design by proper specification of tolerances, use of materials that can be easily processed and also use of economical processes and equipments to produce the product quickly and at a cheaper cost.

(vii) Simplification: This refers to the elimination of the complex features so that the intended function is performed with reduced costs, higher quality or more customer satisfaction. A simplified design has fewer parts which can be manufactured and assembled with less time and cost. "

(viii) Standardisation: Refers to the design activity that reduces variety among a group of products or parts. For example, group technology items have standardised design which calls for similar manufacturing process steps to be followed. Standard designs lead to variety reduction and results in economies of scale due to high volume of production of standard products. However, standardised designs may lead to reduced choices for customers.

(ix) Specification: A specification is a detailed description of a material, part or product, including physical measures such as dimensions, volume, weight, surface finish etc. These specifications indicate tolerances on physical measures which provide production department with precise information about the characteristics of products to be produced and the processes and production equipments to be used to achieve the specified tolerances (acceptable variations).

Interchangeability of parts in products produced in large volumes (mass production and flow-line production) is provided by appropriate specification of tolerances to facilitate the desired fit between parts which are assembled together.

(x) Safety: The product must be safe to the user and should not cause any accident while using or should not cause any health hazard to the user. Safety in storage, handling and usage must be ensured by the designer and a proper package has to be provided to avoid damage during transportation and storage of the product. For example, a pharmaceutical product while used by the patient, should not cause some other side effect threatening the user.

(Mention any six characteristics)

(b) No. of days per month = 25
Daily working hrs = 8
No. of operators = 15
No. of Man days = 15 × 25 = 375 Man days.
Total working hrs. = 375 × 8 = 3,000
Hours lost in absenteeism = 30 × 8 = 240

(i) Percent absenteeism $= \frac{240\text{ hrs.} \times 100}{3000\text{ hrs.}} = 8\%$

(ii) Efficiency of utilisation of labour $= \frac{\text{Standard labour hour to produce 240 units}}{\text{Total labour hour}}$

$= \frac{240 \times 8}{3000} = 64\%$

(iii) Standard time required to produce 240 units = 240 ×8 = 1920 labour-hours.

In November, man hours lost = 30 × 8 = 240
„ „ idle time = 276
Total loss of time = 516 hours.
Productive hours available in November = 3000
Less, Total loss of time = 516
Actual labour-hours = 2484 hours
Efficiency of labour $= \frac{\text{Std. Labour hrs.}}{\text{Actual Labour hrs.}} = \frac{1920 \times 100}{2484} = 77.3\%$

(iv) 15 men produces 300 units,
Std. labour productivity = 300/15 = 20 units.
In November, overall productivity = 240/15 = 16 units. (Ans.)
i.e., productivity falls by 25%.

4. (a) The following jobs have to be shipped a week from now (week has 5 working days)

Job	A	B	C	D	E	F
Number of day's work remaining	2	4	7	6	5	3

Sequence the jobs according to priority established by (a) least slack rule (b) critical ratio rule. [10]

(b) A book store wishes to carry 'Ramayana' in stock. Demand is probabilistic and replenishment of stock takes 2 days (i.e. if an order is placed on March 1, it will be delivered at the end of day on March 3). The probabilities of demand are given below:

Demand (daily)	0	1	2	3	4
Probability	0.005	0.10	0.30	0.45	0.10

Each time on order is placed, the store incurs an ordering cost of ₹10 per order. The store also incurs a carrying cost of ₹ 0.50 per book per day. The inventory carrying cost in calculated on the basis of stock at the end of each day.

The manager of the bookstore wishes to compare two options for his inventory decision.

A. Order 5 books when the inventory at the beginning of the day plus order outstanding is less than 8 books.

B. Order 8 books when the inventory at the beginning of the day plus order outstanding is less than 8.

Currently (beginning 1st day) the store has a stock of 8 books plus 6 books ordered two days age and expected to arrive next day.

Using Monte-Carlo Simulation for 10 cycles, recommend, which option the manager, should choose

The two digit random numbers are given below:

89	**34**	**70**	**63**	**61**	**81**	**39**	**16**	**13**	**73**

[6]

Answer:

4. (a) (a) Calculation of slack :

Number of days until clue date is 5 days for all jobs

Job	Slack	(days)
A	5 - 2	= 3
B	5 - 4	= 1
C	5 - 7	= (-2)
D	5 - 6	= (-1)
E	5 - 5	= 0
F	5 - 3	= 2

Sequence :

C	D	E	B	F	A
-2	-1	0	1	2	3

(b) Calculation of Critical ratio:

$$\text{Critical ratio} = \frac{\text{Due Date - Date Now}}{\text{Lead Time Remaining}} = \frac{\text{DD - DN}}{\text{LTR}} = \frac{\text{Available Time}}{\text{Operation Time}}$$

Critical ratio for job A = 5/2 = 2.5
Critical ratio for job B = 5/4 = 1.25
Critical ratio for Job C = 5/7 = 0.71
Critical ratio for job D = 5/6 = 0.83
Critical ratio for job E = 5/5 = 1.0
Critical ratio for job F = 5/3 = 1.67

Job having least critical ratio is given the first priority and so on.

Sequence :	C	D	E	B	F	A
Critical Ratio :	0.71	0.83	1.0	1.25	1.67	2.5

(b)

Demand	Probability	Cumulative Probability	Range
0	0.05	0.05	0-4
1	0.10	0.15	5-14
2	0.30	0.45	15-44
3	0.45	0.90	45-89
4	0.10	1.00	90-99

Option - A

Day	R No.	Demand	Option	Stock order	Closing Stock	Order Placed
1	89	3	8	-	5	-
2	34	2	5	6	9	-
3	70	3	9	-	6	0
4	63	3	6	-	3	5
5	61	3	3	0	0	-
6	81	3	0	5	2	5
7	39	2	2	-	0	5
8	16	2	0	5	3	-
9	13	1	3	5	7	-
10	73	3	7	-	4	5
					39+5 = 44	

Ordering cost 4 x 10	₹ 40
Ordering cost 0.5 x 44	₹ 22
Total Cost	₹ 62

Option B

Day	R No.	Demand	Option	Orders received	Closing Stock	No. of Orders
1	89	3	8	-	5	-
2	34	2	5	6	9	-
3	70	3	9	-	6	-
4	63	3	6	-	3	8
5	61	3	3	-	0	-
6	81	3	0	8	5	-
7	39	2	5	-	3	8
8	16	2	3	-	1	-
9	13	1	1	8	8	-
10	73	3	8	-	5	-
					45	

Ordering cost 2 x 10	₹ 20.0
Ordering cost 0.5 x 45	₹ 22.5
Total Cost	₹ 42.5

Option 'B' is better because it has low Inventory costs.

5. (a) Project with the following data is to be implemented,. Draw the network and find the critical path.

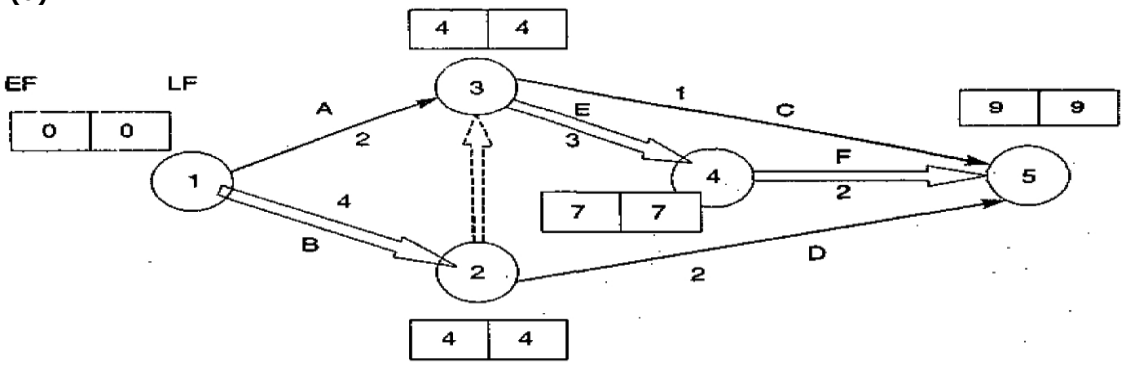
Activity	Predecessor	Duration (days)	Cost (₹ Day)
A	**-**	**2**	**50**
B	**-**	**4**	**50**
C	**A**	**1**	**40**
D	**B**	**2**	**100**
E	**A, B**	**3**	**100**
F	**E**	**2**	**60**

1. **What is the minimum duration of the project?**
2. **Draw a Gantt chart for early start schedule.**
3. **Determine the peak requirement money and day on which it occurs above schedule.** **[6]**

(b) Indian Electronics, manufactures TV sets and carries out the picture tube testing for 2000 hours. A sample of 100 tubes was put through this quality test during which two tubes failed. If the average usage of TV by the customer is 4hours/day and if 10,000 TV sets were sold, then in one year how many tubes were expected to fail and what is the mean time between failures for these tubes? **[10]**

Answer:

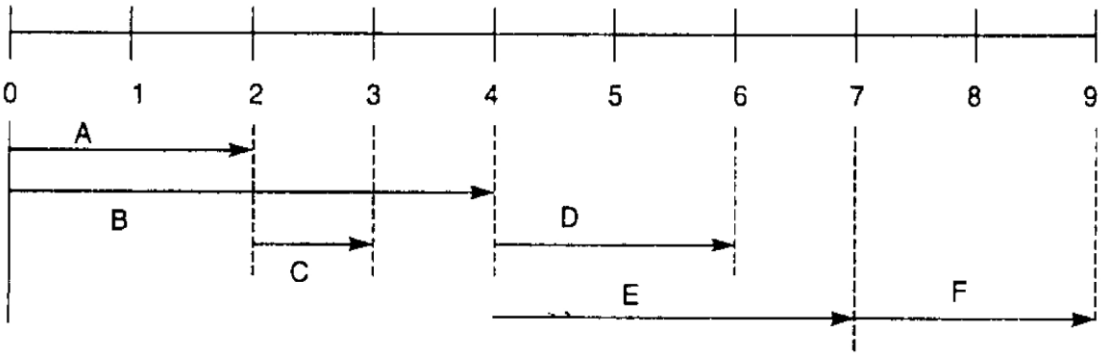
5. (a)



Critical Path 1 – 2 – 3 – 4 – 5
Minimum time = 9

Table : Activity Relationship

Activity	t	ES (EF- t)	EF	LS (LF- t)	LF	Event Slack (LS-ES) (LF-EF)	On Critical Path
A	2	0	2	2	4	2	No
B	4	0	4	0	4	0	Yes
C	1	4	5	8	9	4	No
D	2	4	6	7	9	3	No
E	3	4	7	4	7	0	Yes
F	2	7	9	7	9	0	Yes



(b) The total test time = (100 tubes) × 2000 hours = 200,000 tube-hours.
There are two tubes which have failed and hence the total time is to be adjusted for the number of hours lost due to the failures during the testing.
The lost hours are computed as = $2 \times \frac{2000}{2}$ = 2000 hours.
The assumption is made here is that each of the failed tubes have lasted an average of half of the test period.
Therefore, the test shows that there are two failures during (2,00,000 – 2000) = 1,98,000 tube hours of testing.
During 365 days a year (four hours a day) for 10,000 tubes the number of expected failures $\frac{2}{1,98,000} \times 10,000 \times 365 \times 4 = 147.47 = 148$ tubes approximately.

Mean time between failures = $\frac{1,98,000 \text{ tubes hrs. of testing}}{2 \text{ failure}}$

= 99,000 tubes hours per failure = $\frac{99,000}{4 \times 365}$ = 67.8 tubes year per failure.

SECTION – B

6. (a) Choose the correct Answer: [1x6=6]

(i) A strategic business unit (SBU) is defined as a division of an organization :
(a) That help in the marketing operations;
(b) That enable managers to have better control over the resources;
(c) The help in the choice of technology;
(d) That help in the allocation of scarce resources;
(e) That help in identifying talents and potentials of people

(ii) Indian Airlines decreasing the airfare on the Delhi – Mumbai sector following the introduction of the no frills airlines would be an example of :
(a) Cost leadership
(b) Price leadership
(c) Product differentiate
(d) Focus.
(e) Market retention

(iii) Typically profits are highest in which stage of the industry life-cycle?
(a) Introduction
(b) Growth
(c) Maturity
(d) Decline

(iv) Successful differentiation strategy allows the company to:
(a) gain buyer loyalty to its brands
(b) charge too high a price premium
(c) depend only on intrinsic product attributes
(d) have product quality that exceeds buyers needs
(e) segment a market in to distinct group of buyer

(v) The managerial task of implementing strategy primarily falls upon the shoulders of :
(a) The Chief Executive Officer (CEO);
(b) First line supervisors, who have day-to-day responsibility for seeing that key activities are done properly;
(c) All managers, each attending to what needs to be done in their respective areas of authority and responsibility;
(d) All of the above.

(vi) What are enduring statements of purpose that distinguish one business from other similar Firms?
(a) Policies
(b) Mission statements
(c) Objectives
(d) Rules
(e) Nature of ownership

Answer:

6. (a) (i) (b)
(ii) (b)
(iii) (b)
(iv) (a)
(v) (c)
(vi) (b)

Answer any one question from the following: **[1x12=12]**

7. (a) What do you mean by strategy? State is features. **[6]**

(b) Enlist the advantage of Strategic Management. **[6]**

Answer:

7. (a) STRATEGY:

Strategy is all about integrating organizational activities and utilizing and allocating the scarce resources within the organizational environment so as to meet the present objectives. While planning a strategy it is essential to consider that decisions are not taken in a vacuum and that any act taken by a firm is likely to be met by a reaction from those affected, competitors, customers, employees or suppliers.

Strategy can also be defined as knowledge of the goals, the uncertainty of events and the need to take into consideration the likely or actual behavior of others. Strategy is the outline of decisions in an organization that shows its objectives and goals, reduces the key policies, and plans for achieving these goals, and defines the business the company is to carry on, the type of economic and human organization it wants to be, and the contribution it plans to make to its shareholders, customers and society at large.

Features of Strategy:

(i) Strategy is important to foresight, the uncertain events of firms/industries .
(ii) Strategy deals with long term developments rather than routine operations. For example innovations or new products, new methods of productions, or new markets to be developed in future.
(iii) Strategy is created to deal behavior of customers and competitors.
(iv) Strategy is a well defined roadmap of an organization. It defines the overall mission, vision and direction of an organization. The objective of a strategy is to maximize an organization's strengths and to minimize the strengths of the competitors.

(b) The Advantages of Strategic Management

- **Discharges Board Responsibility**
  The first reason that most organizations state for having a strategic management process is that it discharges the responsibility of the Board of Directors.
- **Forces an Objective Assessment**
  Strategic management provides a discipline that enables the board and senior management to actually take a step back from the day-to-day business to think about the future of the organization. Without this discipline, the organization can become solely consumed with working through the next issue or problem without consideration of the larger picture.
- **Provides a Framework for Decision-Making**
  Strategy provides a framework within which all staff can make day-to-day operational decisions and understand that those decisions are all moving the organization in a single direction.
- **Supports Understanding & Buy-In**
  Allowing the board and staff participation in the strategic discussion enables them to better understand the direction, why that direction was chosen, and the associated benefits. For some people simply knowing is enough; for many people, to gain their full support requires them to understand.
- **Enables Measurement of Progress**
  A strategic management process forces an organization to set objectives and measures of success. The setting of measures of success requires that the organization first determine what is critical to its ongoing success and then forces the establishment of objectives and keeps these critical measures in front of the board and senior management.

- **Provides an Organizational Perspective**
  Addressing operational issues rarely looks at the whole organization and the interrelatedness of its varying components. Strategic management takes an organizational perspective and looks at all the components and the interrelationship between those components in order to develop a strategy that is optimal for the whole organization and not a single component.

8. (a) Distinguish between Strategic Planning and Strategic Management [6]

(b) Discuss Mc Kinsey's 7-s frame work. [6]

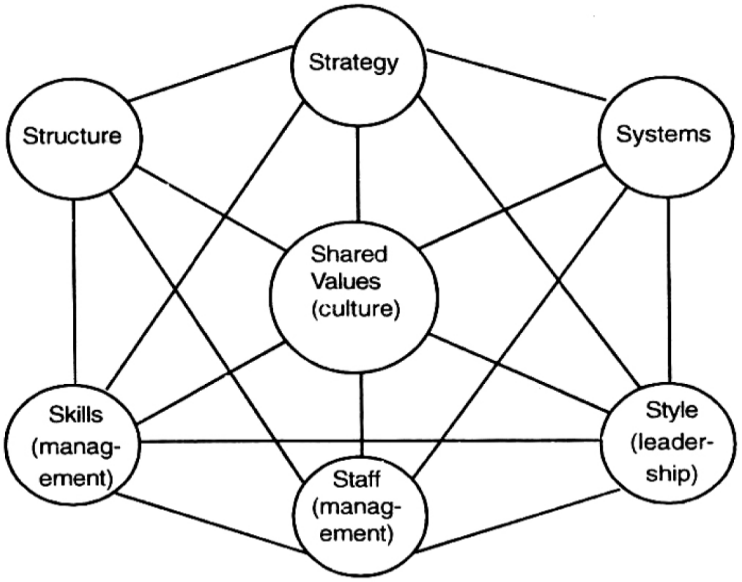
Answer:

8. (a) Strategic Management and Strategic Planning : Distinction

The basic difference between Strategic management and Strategic planning are as follows:

Strategic Management	Strategic Planning
1. It is focused on producing strategic results; new markets; new products; new technologies etc.	1. It is focused on making optimal strategic decisions.
2. It is management by results.	2. It is management by plans.
3. It is an organizational action process.	3. It is an analytical process.
4. It broadens focus to include psychological, sociological and political variables.	4. It is focused on business, economic and technological variables.
5. It is about choosing things to do and also about the people who will do them.	5. It is about choosing things to do.

(b) Strategy is dependent on many variables – Internal as well as external. All factors are interrelated.



McKinsey's 7-S **Framework**

The Mckinsey Company, a well known management consultancy firm in the United States, towards the end of 1970s was asked to find a solution to this knotty issue. The researchers Peters and Waterman found after examining America's best run companies that the problem in strategy lay in its implementation and structure was only one lever in the hands of management. The other levers were systems, staff, style, skills and superordinate goals. A strategy is usually successful when the other S's in the 7-S framework fit into or support the strategy.

- **Strategy:** A set of decisions and actions aimed at gaining a sustainable competitive advantage.
- **Structure:** The organisation chart and associated information that shows who reports to whom and how tasks are both divided and integrated.
- **Systems:** The flow of activities involved in the daily operation of a business, including its core processes and its support systems.
- **Style:** How managers collectively spend their time and attention and how they use symbolic behaviour. How management acts is more important than what management says.
- **Staff:** How companies develop employees and shape basic values.
- **Shared Values:** Commonly held beliefs, mindsets and assumptions that shape how an organisation behaves—its corporate culture.
- **Skills:** An organisation's dominant capabilities and competencies.

9. Write a short note on any of the following three questions: [4×4=16]

(a) Strategic Management Framework;

(b) Marketing Mix;

(c) Functional Organizational Structure;

(d) Matrix Organization Structure.

Answer:

9. (a) Strategic Management Framework:

The basic framework of strategic management involves five stages:

Stage 1: In this stage, organisation analyse about their present situation in terms of their Strengths, Weaknesses, Opportunities and Threats.

Stage 2: In this stage, organisations setup their missions, goals and objectives by analysing where they want to go in future.

Stage 3: In this stage organisation analyses various strategic alternatives to achieve their goals and objectives. The alternatives are analysed in terms of what business portfolio/product mix to adopt, expansion, merger, acquisition and divestment options etc are analysed to achieve the goals.

Stage 4: In this organisations select the best suitable alternatives in line with their SWOT analysis

Stage 5: This is implementation stage in which organisation implement and execute the selected alternatives to achieve their strategic goals and objectives.

Stage 1: Where are we now? Analysis of present situation
Stage 2: Where we want to go? Setting goals and objectives for future
Stage 3: Analyses of various alternatives to achieve the goals and objectives
Stage 4: Selecting best alternatives in line with strengths of organisation
Stage 5: Implementing and executing the selected alternatives and monitoring of the same overtimes

Strategic Management Framework

(b) Marketing mix

Marketing mix is the pack of four sets of variables namely, product variables, price variables, promotion variables and place variable.

"Marketing Mix" refers to the appointment of effort, the combination, designing and integration of the elements of marketing into a programme or mix which, on the basis of an appraisal of the market forces will best achieve the objectives of an enterprise at a given time.

Kotler defines the marketing mix as the set of controllable variables and their levels that the firm uses to influence the target market. Such variables are:

(i) Product
(ii) Place
(iii) Price and
(iv) Promotion

In addition, for service-there are three more P's
They are:

(i) People
(ii) Processes and
(iii) Physical evidence.

(c) Functional structure:

The functional structure is characterized by the simultaneous combination of similar activities and the separation of dissimilar activities on the basis of function. All Cost Accountants are located in the Cost Accounting Department, and the HOD of Cost Accounting is responsible for all cost related activities. The same is true in marketing, research and development, and manufacturing.

The functional organization form is one of the most common organizational structures found in firms pursuing strategy of concentration or very high relatedness. A functional structure is most appropriate when the organization is small to medium size and relatively stable.

(d) Matrix structure:

Another way to achieve focus on multiple outcomes is with the matrix structure. The matrix structure creates a dual chain of command; two lines of budget authority and two sources of performance and reward. The key feature of the matrix is that product (or business) and functional lines of authority are overlaid to form a matrix or grid, between the product manager and functional manager.