OPERATIONS MANAGEMENT & STRATEGIC MANAGEMENT

Time Allowed: 3 Hours | Full Marks: 100

The figures in the margin on the right side indicate full marks.

SECTION – A (Compulsory)

1. Choose the correct option from the four alternatives given: **[15 × 2 = 30]**

(i) In **ROLN LTD.,** a product manufacturing Company, the question "Are we producing the right things"? can be closely related to:
(A) Process Selection
(B) Inventory Management
(C) Maintenance Management
(D) Quality Management

(ii) For Quality Assurance in Design, Production, Installation and Servicing the _____ model is to be used.
(A) ISO 9002 Model
(B) ISO 9001 Model
(C) ISO 9003 Model
(D) None of the above

(iii) A Factory of **XONT Ltd.,** has 13 workers producing a single product. The total output in a month of 24 working days is 370 units. What is the monthly productivity per worker?
(A) 30
(B) 28.46
(C) 15.42
(D) 20

(iv) The Growth phase of the Product Life Cycle is characterized by:
(A) Decline in market share and profits
(B) Rapid increase in sales and market expansion
(C) Withdrawal of the product from the market
(D) Lack of promotional activity

(v) Which of the following phases of Project Management Life Cycle, Signals the official end of the Project and provides a period for reflection, Wrap-up, and organization of materials?
(A) Execution Phase
(B) Project Quality Management
(C) Project closure
(D) Planning Phase

(vi) A Gantt Chart is also known as a _____

(A) Bar Chart
(B) Flow Chart
(C) Line Graph
(D) "Z" Chart

(vii) Which of the following is / are the primary Constraint(s) of a Project?

(A) Quality
(B) Time
(C) Cost
(D) All of the above (A), (B) and (C)

(viii) The SLACK Time of Head event of Activity-ZB of a Project-ROT is 2 days. If the total Float and Independent float of the Activity-ZB are 10 days and 5 days respectively, the Slack time of Tail event of the same will be _____

(A) 4 Days
(B) 3 Days
(C) 2 Days
(D) None of these

(ix) **BXON Ltd.,** produces a Product-XN in its Machine-MB. Its Product-XN has a Mean Time Between Failure (MTBF) of 13.50 hours and has a Mean Time to Repair (MTTR) a Machine of 1.50 hours. What will be the availability of a Machine of Product-XN?

(A) 80 %
(B) 90 %
(C) 75 %
(D) None of the above

(x) **POTN Company** has kept records of breakdowns of its Machines for 300 days work a year as shown below:

No. of Breakdown	Frequency in days
1	90
2	150
3	60

If the Company estimates that each breakdown Costs ₹750, What will be the Cost of breakdown per day?

(A) ₹ 1500
(B) ₹ 1425
(C) ₹ 1348
(D) None of the above

(xi) Which of the following Types of Strategy, is about how to Compete Successfully in particular markets?
(A) Corporate Strategy
(B) Business Strategy
(C) Functional Strategy
(D) Operational Strategy

(xii) Which of the following organization is associated with the Vision in a brief phase "To make the world more open and connected"?
(A) Amazon
(B) Infosys
(C) Facebook
(D) Tesla

(xiii) What does **"F"** in the FAST goal setting framework stand for?
(A) Financially Viable
(B) Fully achievable
(C) Frequently discussed
(D) Fully Transparent

(xiv) Business Environment is _____
(A) Complex
(B) Dynamic
(C) Multi-faceted
(D) All of the above

(xv) Which among the following is true?
(A) BPR has resulted in major gains in efficiency.
(B) BPR has resulted in major gains in speed.
(C) BPR has resulted in major gains in quality.
(D) BPR has resulted in major gains in efficiency, quality and speed.

Answer:

(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(xiii)	(xiv)	(xv)
D	B	B	B	C	A	D	B	B	B	B	C	C	D	D

Section – B

(Answer any 5 questions out of 7 questions given. Each question carries 14 Marks)

[5 × 14 = 70]

2. (a) "Capacity is the rate of productive capability of a facility" and the effective Capacity is influenced by various factors". With reference to this statement Identify the said factors influencing the effective Capacity. [7]

(b) "A good product design must ensure the various characteristics". In this context, summarise the said Characteristics of good product design. [7]

Answer:

(a) The effective capacity is influenced by the following factors:

(i) Forecasts of demand: Demand forecast is going to influence the capacity plan in a significant way. As such, it is very difficult to forecast the demand with accuracy as it changes significantly with the product life-cycle stage, number of products. Products with longer lifecycle usually exhibit steady demand growth compared to one with shorter lifecycle. Thus, the accuracy of forecast influences the capacity planning.

(ii) Plant and labour efficiency: It is difficult to attain 100 per cent efficiency of plant and equipment. The efficiency is less than 100 percent because of the enforced idle time due to machine breakdown, delays due to scheduling and other reasons. The plant efficiency varies from equipment to equipment and from organisation to organisation. Labour efficiency contributes to the overall capacity utilization.

(iii) Subcontracting: Subcontracting refers to off-loading, some of the jobs to outside vendors thus hiring the capacity to meet the requirements of the organisation. A careful analysis as to whether to make or to buy should be done. An economic comparison between cost to make the component or buy the component is to be made to take the decision.

(iv) Multiple shift operation: Multiple shifts are going to enhance the firm's capacity utilisation. But especially in the third shift the rejection rate is higher. Specially for process industries where investment is very high it is recommended to have a multiple- shifts.

(v) Management policy: The management policy with regards to subcontracting, multiplicity of shifts (decision regarding how many shifts to operate), which work-stations or Departments to be run for third shift, machine replacement policy, etc., are going to affect the capacity planning.

(b) The Characteristics of a good Product design are appended below:

(i) **Product quality:** The product must satisfy the needs of the end customers while providing optimum value. The performance should be at par with the expectations.

(ii) The product must be reliable and worthy for paying for the same.

(iii) The product must be designed at an optimum cost to be offered at an affordable price to the target customers.

(iv) The product must be having a shorter design to market lead time.

(v) The aesthetics/looks of the product must create an immediate impression in the minds of the customers.

(vi) The product must be compatible, user-friendly and upgradable with availability of after sales support (e.g., spare parts).

(vii) The product must be easily maintainable and reproducible.

(viii) The product should balance between standardized basic features and customized augmented features.

(ix) A detailed specification.

(x) The product must be safe to use, error proof and should not harm the environment and users.

3. (a) ROGEN Ltd., a Manufacturing Company is using a Machine whose purchase price is ₹180000. The installation charges amount to ₹ 38000 and the machine has a scrap value of ₹18000 because the firm has a monopoly of this type of work. The maintenance cost in various years is given in the following table:

Year	1	2	3	4	5	6	7	8	9
Maintenance Cost (₹)	2500	7500	12000	18000	24000	31000	42000	52000	63000

Required:

(i) Calculate the average annual Cost of replacement of a machine for each year.

(ii) Assess and identify after how many years should the machine be replaced on economic considerations, assuming that the machine replacement can be done only at the year end. [7]

(b) The following table gives the age of Cars VEE20 of Mahindra make and its Annual Maintenance Cost.

Age of Cars in Years (X)	2	4	6	8
Maintenance Cost (in thousands of ₹) (Y)	20	40	50	60

Required:

(i) Fit Linear Regression of Y on X.

(ii) Identify the Maintenance Cost for Age of Cars of 10 years.

(iii) Identify the Age of Cars in years for Maintenance cost of ₹ 80000. [7]

Answer:

(a) (i) Analysis & Assessment of Annual Average Cost (Rs.) of a Machine.

Year	Maintenance Cost M_1 (Rs.)	Cumulative Maintenance Cost $\sum M_1$ (Rs.)	Cost of Machine - Scrap Value; (Rs.)	Total Cost $T_{(n)i}$ (Rs.)	Annual
(i)	(ii)	(iii)	(iv) = 180000 + 38000 – 18000 = 200000	(V) = (iii) + (iv)	(vi) = (v)/n
1.	2500	2500	200000	202500	202500
2.	7500	10000	200000	210000	105000
3.	12000	22000	200000	222000	74000
4.	18000	40000	200000	240000	60000
5.	24000	64000	200000	264000	52800
6.	31000	95000	200000	295000	49166.67
7.	42000	137000	200000	337000	48142.86
8.	52000	189000	200000	389000	48625
9.	63000	252000	200000	452000	50222.22

Lowest average Cost is Rs. 48142.86 which is corresponding to n = 7 in above Table. Thus, machine needs to be replace **every 7th Year.**

(b) (i) Linear Regression of Y on χ

Age of Cars (Years) "X"	Maintenance Cost (Rs in "000") "Y"	χ^2	χy
2	20	4	40
4	40	16	160
6	50	36	300
8	60	64	480
$\sum\chi = 20$	$\sum y = 170$	$\sum\chi^2 = 120$	$\sum\chi y = 980$

Regression equation of Y on Y.

Y = a + bx

To find the value of **a** and **b**, we have to solve the following two equations,

$\sum y = na + b\sum\chi$ eqn. ..... (i)

$\sum\chi y = a\sum\chi + b\sum\chi^2$ eqn. ..... (ii)

By putting the value we get.

$170 = 4a + 20b$ eqn. ..... (iii)

$980 = 20a + 120b$ eqn. ..... (iv)

By multiplying eqn. (iii) by 5 and putting in eqn. (v) we get

$850 = 20a + 100b$ eqn. ..... (v)

By Subtracting eqn. (v) from eqn. (iv) we get

$130 = 20\,b$ or, $20\,b = 130$ or, $b = 6.50$

By Substituting the value of b in eqn. (iii)

$170 = 4a + 20 \times 6.5 = 4a + 130$

or, $4a = 170 - 130$ or, $4a = 40$ or, $a = 10$

Now putting the value of a and b the required Regression equation of y on x is

$Y = 10 + 6.50\,\chi$

(i) Maintenance Cost (Rs. "000") for Age of Cars of 10 years:
(When χ = 10) Y = 10 + 6.5 x 10 = Rs. 75 Thousand

(ii) Age of Car in Years for Maintenance Cost of Rs. 80 Thousand
When y = 80, Y = 10 + 6.5 χ will be

80 = 10 + 6.5 χ

Or, $\chi = \frac{70}{6.5} = 10.77$ Years

4. (a) MR. SOHAN, a marketing Manager of WANCHO Ltd., has four Salesmen and four Sales districts. Considering the capabilities of the Salesmen and the nature of districts, Mr. Sohan estimates that sales per month (in thousand Rupees) for each Salesman in each district would be as follows:

	District			
Salesman	**P**	**B**	**S**	**T**
PS	**60**	**53**	**46**	**39**
TB	**48**	**43**	**38**	**33**
RM	**48**	**43**	**38**	**33**
SB	**42**	**38**	**34**	**30**

Required:

(i) Analyze and assign the appropriate district to each Salesman to maximize the Sales.

(ii) Calculate the Total Sales (₹ in thousand pertaining thereto. [7]

(b) The following was the pattern for demand of cars rented out by BUANIM, a tourist operator observed for 100 days.

No. of Cars	**7**	**10**	**12**	**15**
No. of Days	**20**	**30**	**40**	**10**

BUANIM, has only 10 Cars currently. Consider the following Table of two-digit random numbers:

Random Numbers	**92**	**88**	**76**	**10**	**23**

Required:

(i) Using the generated random numbers in Sequence, Simulate the demand for Cars over five days.

(ii) Calculate the Average number of cars rented per day for the 5 days.

(iii) Analyze how many rentals will be lost over the 5 days. **[7]**

Answer:

(a)

(i) *Relative Loss Matrix*

District / Sales Man	P	B	S	T
PS	0	7	14	21
TB	12	17	22	27
RM	12	17	22	27
SB	18	22	26	30

As this is a problem of Maximization, the same is converted to one of minization by a Relative loss Matrix where all the elements of the given matrix are subtracted from the highest element of the matrix (60).

Matrix after Row Operation

District / Sales Man	P	B	S	T
PS	0	7	14	21
TS	0	5	10	15
RM	0	5	10	15
SB	0	4	8	12

Matrix after Column Operation

District / Sales Man	P	B	S	T
PS	0	3	6	9
TB	0	1	2	3
RM	0	1	2	3
SB	~~0~~	~~0~~	~~0~~	~~0~~

Maximum No. of Horizontal and vertical line = 2 ≠ 4

Improved Matrix (Non-Optimal)

District / Sales Man	P	B	S	T
PS	0	2	5	8
TB	0	0	1	2
RM	0	0	1	2
SB	~~1~~	~~0~~	~~0~~	~~0~~

Mixiumum No. of Horizontal and vertical line = 3 ≠ 4

Further Improved Matrix (Optimal)

District / Sales Man	P	B	S	T
PS	0	2	4	7
TB	0	0	0	1
RM	0	0	0	1
SB	~~2~~	~~1~~	~~0~~	~~0~~

Maximum No. of Horizontal and Vertical line =4 =4. So the Solution is Optimal.

Allocation can be done as under

District / Sales Man	P	B	S	T
PS	[0]	2	4	7
TB	0	[0]	0	1
RM	0	0	[0]	1
SB	2	1	0	[0]

Alternative Allication as under

District / Sales Man	P	B	S	T
PS	[0]	2	4	7
TB	0	0	[0]	1
RM	0	[0]	0	1
SB	2	1	0	[0]

Table – 1			**Table – 2**		
Assignment as per Table – 1			**Assignment as per Table – 2**		
Sales man	**District**	**Sales (Rs. in Thousand)**	**Sales man**	**District**	**Sales (Rs. in Thousand)**
PS	P	60	**PS**	P	60
TB	B	43	**TB**	S	38
RM	S	38	**RM**	B	43
SB	T	30	**SB**	T	30
	TOTAL	**171**		**TOTAL**	**171**

(b) (i)

Daily demand	No. of Days	Probability	Cumulative Probability	Random Number Interval	Day	Random Number	Demand	Rented	Rental Lost
7	20	0.2	0.2	0 – 19	1	92	15	10	5
10	30	0.3	0.5	20 – 49	2	88	12	10	2
12	40	0.4	0.9	50 – 89	3	76	12	10	2
15	10	0.1	1	90 - 99	4	10	7	7	0
					5	23	10	10	
								47	9

(ii) Average No. of Cars Rented per day for 5 Days.

$$\frac{47}{5} = 9.40 \text{ Cars}$$

(iii) Rental lost over the 5 days = 9 Nos.

5. (a) The simplex calculator company makes a profit of ₹5 on each model X and ₹20 on each model Y. Each calculator requires the following time (in minutes) on the cleaning and testing machines.

	X Requirements	Y Requirements	Time Available
Cleaning Testing	2 6	4 3	10 12

(i) **State the objective function and constraints.**

(ii) **Arrange the equations in a simplex format.** **[7]**

(b) SOFTECH CONSULTANCY SERVICES LTD. is developing a Software for online power transmission and distribution of a power supply Company. The Software development project has identified the following activities along with their expected duration (in days) under 3 Scenarios:

Activity and Identification		Duration in Days		
		Optimistic	Most likely	Pessimistic
A	1 – 2	12	16	20
B	1 – 3	15	20	25
C	2 – 3	6	8	10
D	2 – 4	8	10	12
E	3 – 4	5	6	7
F	4 – 5	8	12	16

Required:

(i) Analyze the expected duration (in days) for each activity.

(ii) Prepare the PERT Net-work diagram indicating all paths through it.

(iii) Identify the Critical path and its duration (in days).

(iv) Analyze and indicate the total Float and free float of each activity. **[7]**

Answer:

(a)

(i) Objective function Max Z = 5X + 20Y

Constraints:

Cleaning $2X + 4Y \leq 10$

Testing $6X + 3Y \leq 12$

(ii)

C → ↓ Variables in solution		5	20	0	0	Solution Values (RHS)
			Decision	variables		
		X	Y	S_1	S_2	
0	S_1	2	4	1	0	10
0	S_2	6	3	0	1	12
Z		0	0	0	0	0
C-Z		5	20	0	0	

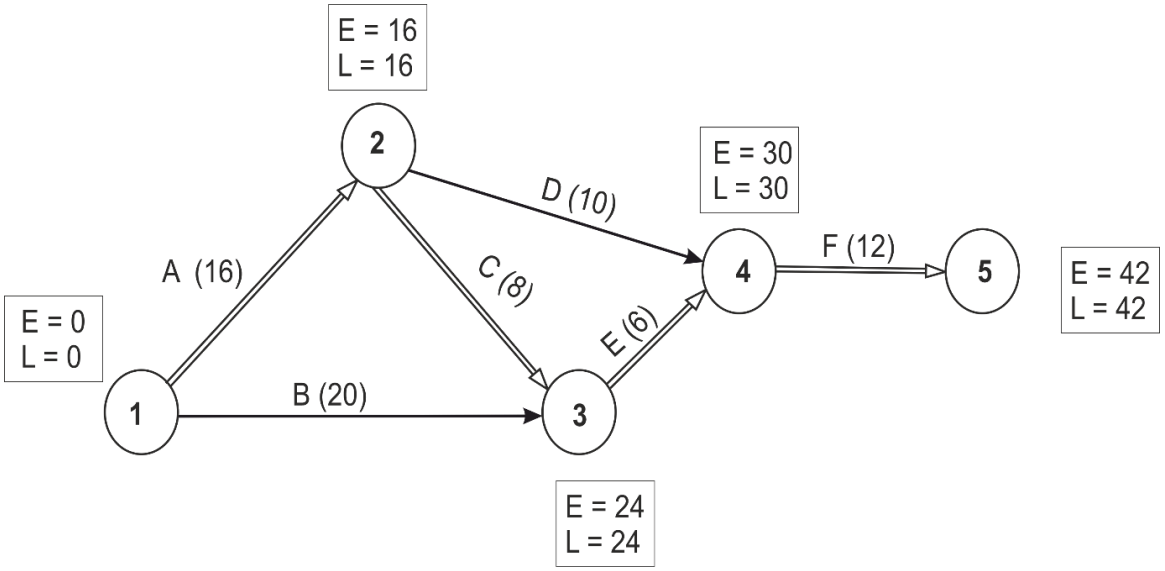
(b)

(i) + (iv)

Activity and Identification		Expected Duration $T_e = \frac{o + 4m + p}{6}$	(Duration in DAYS) EST	EFT	LST	LFT	Total Float	Free Float
A	1 – 2	(12 + 4 x 16 + 20)/6 = 16	0	16	0	16	0	0
B	1 – 3	(15 + 4 x 20 + 25)/6 = 20	0	20	4	24	4	4
C	2 – 3	(6 + 4 x 8 + 10)/6 = 8	16	24	16	24	0	0
D	2 – 4	(8 + 4 x 10 + 12)/6 = 10	16	26	20	30	4	4
E	3 – 4	(5 + 4 x 6 + 7)/6 = 6	24	30	24	30	0	0
F	4 – 5	(8 + 4 x 12 + 16)/6 = 12	30	42	30	42	0	0

TABLE - 1

(ii)



(NETWORK)

(iii) Critical Path is : A – C – E – F

Expected Duration = 16 + 8 + 6 + 12 = 42 Days

(iv) Total Float and Free Float of each Activity are as follows:

Activity and Identification		Expected Duration (in Days)	Total Float	Free Float
A	1 – 2	16	0	0
B	1 – 3	20	4	4
C	2 – 3	8	0	0
D	2 – 4	10	4	4
E	3 – 4	6	0	0
F	4 – 5	12	0	0

6. (a) Explain the concept of Balanced Scorecard as a performance management tool. How does it help in linking financial and strategic objectives of an organisation? Also explain the four perspectives from which organisational performance should be evaluated. [7]

(b) "Although the idea of IoT has been in existence for a long time, a collection of recent advances in a number of different technologies has made it practical". – In this context identify the said technologies. [7]

Answer:

(a) The Balanced Scorecard is a performance management tool that helps organisations measure and manage performance by combining financial and non-financial measures. It translates an organisation's vision and strategy into clear, measurable objectives and evaluates performance from four perspectives: financial, customer, internal business processes, and learning and growth.

The sole purpose of setting objectives is to convert the vision and mission into specific measurable targets. There are broadly two types of objectives namely, financial and strategic.

- Financial objectives relate to the financial performance targets that the management has established for the organisation to achieve.
- Financial objectives of an organisation can include increasing the annual revenues, annual increase in the earnings per share, profit margins of fixed percent, increased shareholder value, generating internal cash flows, etc.

  Strategic objectives relate to target outcomes that indicate whether a company is strengthening its market standing, competitive position and future business prospects.
- Strategic objectives of an organisation can include winning a certain per cent of market share, achieving lower overall costs than competitors, developing broader, better and deeper technological capabilities than rivals, consistently getting new or improved products to market ahead of the rivals, having stronger national and global sales and distribution capabilities than rivals, etc.

There is a need to balance the financial objectives with the strategic objectives. It is imperative that attaining financial objectives that includes adequate profitability and financial strength is of paramount importance as the organisation's long-term health and ultimately its survival will depend on it. However, one cannot ignore the need for accomplishment of strategic objectives as it signals whether the organisations competitive position is on the rise or not. It may be mentioned that one can expect a strong financial performance if the competitive strength and market position is on the rise.

The most widely used method for combining the use of both strategic and financial objectives, tracking their achievement, and giving management a more complete and balanced view of how well as organisation is performing is known as the balanced score card. This is a method for linking financial objectives to specific strategic objectives that derive from a company's business model. It provides a company's employees with clear guidelines about how their jobs are linked to overall objectives of the organisation, so that they can contribute most productively and collaboratively to the achievements of these goals.

The balanced score card was developed by Robert S. Kaplan and David Norton of Harvard Business School. This system tries to do away with the overemphasis on short term financial objectives and tries to improve organisational performance by focusing attention on measuring a wide range of non-financial, operational objectives. Later, the system also tried to incorporate the strategic planning technique.

The balanced score card is a top-down approach to performance management. It starts with the strategic intent and ends with operationally relevant targets. The balance score card model requires an evaluation of organisational performance from four different perspectives.

- **Financial Perspective:** It considers the financial measures such as revenues, earnings, return on capital and cash flow arising out from the strategic intent of the organisation.
- **Customer's Perspective:** This measures the ability of the organisation to provide quality goods and services, effective delivery and overall customer's satisfaction. Customer's perspective includes market share, customer satisfaction measures and customer loyalty.
- **Internal Business Perspective:** The mechanisms through which the performance expectations are achieved are called as internal businesses processes. This provides data regarding the internal business results that have led to financial success and satisfied customers. It is very important to identify the key business processes that should be excelled to meet the organisational objectives and customer satisfaction.
- **Learning and Growth Perspective:** This perspective focuses on the ability of the organisation to manage its business and adapt to changes in the environment. Organisations take on new responsibilities that require its employee to develop new skills and capabilities in order to cope with the changing environment and customer expectations.

(b) Although the idea of lot has been in existence for a long time, a collection of recent advances in a number of different technologies has made it practical. These technologies include:

(i) **Access to low-cost, low-power sensor technology:** Affordable and reliable sensors are making lot technology possible for more manufacturers.

(ii) **Connectivity:** A host of network protocols for the internet has made it easy to connect sensors to the cloud and to other "things" for efficient data transfer.

(iii) **Cloud computing platforms:** The increase in the availability of cloud platforms enables both businesses and consumers to access the infrastructure they need to scale up without actually having to manage it all.

(iv) **Machine learning and analytics:** With advances in machine learning and analytics, along with access to varied and vast amounts of data stored in the cloud, businesses can gather insights faster and more easily. The emergence of these allied technologies continues to push the boundaries of loT and the data produced by loT also feeds these technologies.

Conversational artificial intelligence (Al): Advances in neural networks have brought natural-language processing (NLP) to loT devices (such as digital personal assistants Alexa, Cortana, and Siti) and made them appealing, affordable, and viable for home use

7. (a) "In spite of the fact that SWOT Analysis has several benefits yet, it has some limitations". With reference to this statement, analyse and align the limitations of SWOT Analysis. [7]

(b) "In medium and Large organizations the various mechanism may be employed for identifying strategic". With reference to this statement, identify and analyze the said Mechanisms. [7]

Answer:

(a) The Limitations of SWOT analysis are aligned as under:

(i) It is at times very difficult for organisations to clearly segment opportunities and threats. Sometimes an opportunity can also have an element of threat. For e.g. having a nuclear plant can be a great opportunity as it can lead to generation of low-cost energy however, the threats cannot be undermined. The cost of mitigating threats can be huge.

(ii) SWOT exercise can generate very long lists of apparent strengths, weaknesses, opportunities and threats, whereas what matters is to be clear about what is really important and what is less important.

(iii) There is a danger of over generalisation. Identifying a very general explanation of strategic capability does not explain the underlying reasons for that capability. SWOT analysis is not a substitute for more rigorous, insightful analysis such as core competences, critical success factors, strategic gap, value chain, etc.

(iv) Simplicity of use may turn to be simplistic by trivialising the reality that may be more complex than represented in SWOT matrices.

(v) May result in just compiling lists rather than think about what is really important for achieving objectives.

(vi) Usually reflects an evaluator's position and viewpoint that can be misinterpreted to justify a previously decided course of action, rather than be used as a means to open new possibilities.

(vii) Chances exist where strengths may be confused with opportunities or weaknesses with threats.

(viii) May encourage organisations to take a lazy course of action of looking for strengths that match opportunities rather than developing new strengths that could match the emerging opportunities.

(b) In medium and large organizations, the following mechanisms may be employed for identifying strategic alternatives.

(i) Brainstorming Sessions:

In most organizations, strategic alternatives are identified during brainstorming sessions of top management and key executives. In such meetings, participants

generate a number of alternatives. At this stage, no importance is given to the relative merits and demerits of the options. In the next stage, each alternative is reviewed and subjected to close scrutiny. The alternatives which are considered fairly appealing are further examined and analyzed for final selection.

(ii) Special Meetings:

Some large organizations may hold special meetings of top executives away from their work, in a hotel or a holiday resort. This is to ensure that the process of thinking is not disturbed by interruptions during the course of deliberations. The participants present different alternative scenarios along with their recommended courses of action. Depending on the assumptions and future trends, each course of action is discussed and attempts are made to finalize the best options for further analysis.

(iii) Outside Consultants:

Some organizations may engage the services of an outside consultant to handle the process of generating alternative strategies. The premise is that an outsider can observe the phenomenon objectively and dispassionately, and bring in his own expertise into the process. The outside viewpoint is expected to be new and fresh, and thus can show up many new opportunities to the organization.

(iv) Joint Meetings:

Another useful way of generating alternatives is to hire the services of a consultant and also associate some internal members in the process. This method has the advantage of blending the new ideas contributed by the outside consultants with workable solutions from within the organization.

8. (a) "In designing a Control System top Management should remember that control should follow Strategy". In this Context discuss the guidelines a Strategic manager should keep in mind while implementing proper control. [7]

(b) Analyze and Align the potential advantages and disadvantages of divisional Structure of the organisation. [7]

Answer:

(a) The following guidelines, a strategic manager should keep in mind while implementing proper control are recommended:

(i) Control should involve only the minimum amount of information needed to give a reliable picture of events: Too many controls create confusion. Focus on the strategic factors by following Pareto's 80/20 rule: Monitor those 20% of the factors determines 80% of the results.

(ii) Control must be reasonable. Frequent reporting and rapid reporting may frustrate control.

(iii) Controls do not work unless they are acceptable to those who apply them.

(iv) Controls should monitor only meaningful activities and results, regardless of measurement difficulty: If cooperation between divisions is important to corporate performance, some form of qualitative or quantitative measure should be established to monitor cooperation.

(v) Controls must be flexible to take care of changing circumstances.

(vi) Controls should be timely so that corrective action can be taken before it is too late: Steering controls, controls that monitor or measure the factors influencing performance, should be stressed so that advance notice of problems is given.

(vii) Long-term and short-term controls should be used: If only short-term measures are emphasized, a short-term managerial orientation is likely.

(viii) Controls should aim at pinpointing exceptions: Only activities or results that fall out-side a predetermined tolerance range should call for action.

(ix) Emphasize the reward of meeting or exceeding standards rather than punishment for failing to meet standards: Heavy punishment of failure typically results in goal displacement. Managers will fudge reports and lobby for lower standards.

If corporate culture complements and reinforces the strategic orientation of a firm, there is less need for an extensive formal control system.

(b) The following potential advantages and disadvantages of Divisional Structures of the organization are analyzed and aligned:

Potential advantages:

(i) They are flexible in the sense that organisations can add, close or merge divisions as circumstances change.

(ii) As self-standing business units, it is possible to control divisions from a distance by monitoring business performance.

(iii) Divisional managers have greater personal ownership for their own divisional strategies.

(iv) There can be benefits of specialisation within a division, allowing competences to develop with a clearer focus on a particular product group, technology or customer group.

(v) Management responsibility for a whole divisional business is good training in taking a strategic view for managers expecting to go on to a main board position.

(vi) Conflicts across functional areas can be minimized with increased accountability and focus.

Disadvantages:

(i) Divisions can become so self-sufficient that they are de facto independent businesses but duplicating the functions and costs of the corporate centre of the company. So, it may make more sense to split the company into independent businesses, and demergers of this type have been very common.

(ii) Divisionalisation tends to get in the way of cooperation and knowledge sharing between business units: divisions can quite literally divide. Expertise is fragmented and divisional performance targets provide poor incentives to collaborate with other divisions.

(iii) Divisions may become too autonomous, especially where, joint ventures and partnership dilute ownership. In these cases, multidivisional degenerate into holding companies, where the corporate centre effectively 'holds' the various businesses in a largely financial sense, exercising little control and adding very little value.

(iv) Differences in image and quality may occur across divisions.

(v) There are chances of divisions focusing on short term performances with a perspective of dominating the organisation-wide.