FINAL EXAMINATION

GROUP IV

(SYLLABUS 2012)

SUGGESTED ANSWERS TO QUESTIONS

DECEMBER 2015

Paper-17 : STRATEGIC PERFORMANCE MANAGEMENT

Time Allowed : 3 Hours **Full Marks : 100**

The figures in the margin on the right side indicate full marks.
This Question paper has been divided into 3 parts viz., Section-A (60 marks), Section-B (20 marks) and Section-C (20 marks).

Please note:

- **From *Section-A*: Performance Management, you are to answer Question No. 1, which is *compulsory*, carrying 20 marks. Further answer any *two Questions* from the rest of the Question in this section, each carrying 20 marks.**
- **From *Section-B*: IT & Econometric tool in Performance Management, your are to answer any *two Questions*, each carrying 10 marks.**
- **From *Section-C*: Enterprise Risk Management, you are to answer any *two Question*, each carrying 10 marks.**

SECTION A (60 Marks)

Performance Management

Answer Question No. 1, which is compulsory, carrying 20 marks.
Further answer* any two Questions *from the rest of the
Questions in this section, each carrying 20 marks.

1. **This Case Study explains why Nestle Inc. needs a first class Supply Chain, with high quality linkages from where the coffee is grown in the field, to the way in which it reaches the consumer. For Nestle's, the Supply Chain is a bit complex and includes:**
    - **Growers of Coffee**
    - **Intermediaries like dealers/brokers/roasters/retailers, etc., Some Intermediaries may buy Coffee and doing some of the primary processing.**

- **Growing and processing of Coffee. This includes activities like coffee picking, drying and hulling sorting, grading & picking.**
- **Price-Balancing Supply and Demand: Coffee prices are determined on day-to-day basis on the world commodity markets in London and New York. The price of Coffee is determined by the relationship between the amount of Coffee available to be sold (Supply) and the amount which the company would like to buy (demand). If there is more Coffee available than what the company would desire to buy at current prices, the prices will fall. The market, thus, ultimately determines the price that the farmer receives.**
- **Nestle's Trading Methods: Nestle is a pioneer in purchasing Coffee direct from growers. A growing % of the company's Coffee is bought direct from the producer and it is now one of the world's largest direct purchasers. In Countries, where this is not possible, Nestle operates in a way that takes it as close to the growers as possible.**
- **Buying from dealers: In countries like UK, it is impossible for Nestle to buy from the hundreds of thousands of farmers, who ultimately supply the Company and so the coffee is bought from dealers, using the international market.**

Conclusion: Creating wonderful cups of Coffee is not only Nestle's business, it is the business of everyone involved in the Supply Chain. It is in everyone's interest the farmers' and Nestle's – that farmers receive a fair income from their Coffee. This ensures that they will continue to grow Coffee and to invest in increasing their yield and quality and this in turn, guarantees the supply of quality Coffee, which companies like Nestle require.

In the context of the above case study, answer the following questions:

(i) What is Supply Chain Management? Explain clearly its basic concept?

(ii) What are the basic objectives of a Supply Chain?

(iii) State the way Nestle Inc., manages its Supply Chain? 8+5+7=20

Answer:

1. (i)

Supply Chain Management (SCM) is the active management of Supply Chain activities to maximize customer value and achieve a sustainable Competitive Advantage.

A Supply Chain is a network of facilities and distribution options that performs the functions of Procurement of materials, transformation of these materials into intermediate and finished goods and the distribution of these finished goods to the customers. Supply Chain exists in both Service and Manufacturing Organizations. The complexity of the chain may vary greatly from Industry to Industry and from firm to firm.

The concept of Supply Chain Management (SCM) is based on the core idea that every product that reaches an end user represents the cumulative effort of multiple organizations and collectively referred to as Supply Chain.

Supply Chain Management (SCM) represents a conscious effort by the Supply Chain firms to develop and run Supply Chains in the most effective and efficient ways possible.

In 1980s companies discovered new manufacturing technologies and strategies that allowed them to reduce costs and compete better in different markets. Strategies like JIT manufacturing, Lean Manufacturing, TQM etc., became very popular and vast amounts of resources were

invested in implementing these strategies. Many companies have reduced manufacturing cost to the barest minimum.

Many companies are discovering that effective SCM is the next step that must be taken to increase Profit and market share.

SCM is a strategy/mechanism, through which different functions can be integrated.

SCM is not a new innovation in management philosophy. Rather it existed since the time of Napoleon, as he commended once "Army marches on its stomach." He did not explain his statement but the inner meaning is unquestionable i.e., to make a strategy successful, it should have a strong line of supply be it food, clothes, arms or anything else.

Thus, SCM is the management of upstream and downstream value-added flow of materials, final goods and related information among Suppliers, Company, Re-Sellers and final customers. It is a systematic and strategic co-ordination of the traditional business functions with a view to improving the long-term performance of the company. It encompasses the planning and management of all activities involved in Sourcing, Procurement, Conversions and Logistic Management.

In a nutshell, SCM implies all such activities by which the final product is delivered in the hands of customers.

Logistics is the logical way of transportation in a timely way so that Production and Distribution are not hampered.

But in SCM, we take into account all the aspects of the Product like:

- Sales demand analysis
- Production Planning
- Procurement of Raw-Material
- Ware-housing
- Production Process/Conversion
- Operations Management
- Logistics Management
- Distribution of Finished goods to the ultimate customers in a well-synchronized manner.

One Supplier is dependent on the other's service and the very other is depending on some other unit's performance. If one unit of the chain does not meet the demand of the very next level producer, members of the whole chain face problems. That is the importance of Supply Chain.

1. (ii) Objectives of Supply Chain:

The following are the basic objectives of Supply Chain:

- Maximization of the overall value created
- Takes into consideration that every facility has an impact on cost and should play a role in making the product conform to customer requirements: from Supplier and manufacturing facilities through warehouses and distribution centres to retailers and stores.
- SCM should be efficient and cost-effective across the entire system; total system wide costs from transportation and distribution to inventories of R/M, WIP and finished goods are to be minimized.

- SCM revolves around efficient integration of Suppliers, Manufacturers, Warehouses and Stores; it encompasses the firm's activities at many levels, from the strategies level through the tactical to the operational level.
- Increase the Supply Chain Profitability.
- Balancing the Demand and the Supply.

1. (iii) Nestle's Supply Chain:

Nestle's the Supply Chain is a bit complex and includes:

- Growers of Coffee
- Intermediaries like dealers/brokers/roasters/retailers, etc., Some Intermediaries may buy Coffee and doing some of the primary processing.
- Growing and processing of Coffee. This includes activities like Coffee picking, Drying and hulling, sorting, grading & picking.
- Price-Balancing Supply and Demand: Coffee prices are determined on day-to-day basis on the world commodity markets in London and New York. The price of Coffee is determined by the relationship between the amount of Coffee available to be sold (Supply) and the amount which the company would like to buy (demand). If there is more Coffee available than what the company would desire to buy at current prices, the prices will fall. The market, thus, ultimately, determines the price that the farmer receives.
- Nestle's Trading Methods: Nestle is a pioneer in purchasing Coffee direct from growers. A growing % of the company's Coffee is bought direct from the producer and it is now one of the world's largest direct purchasers. in Countries, where this is not possible, Nestle operates in a way that takes it as close to the growers as possible.
- Buying from dealers: In countries like UK, it is impossible for Nestle to buy from the hundreds of thousands of farmers, who ultimately supply the Company and so the Coffee is bought from dealers, using the international market.

2. (a) Krish of India presently operates its plant at 80% of the normal capacity of manufacture a product only to meet the demand of Government of India under a rate contract. He supplies the product for ₹ 4,00,000 and earns a profit margin of 20% on sales realizations. Direct Cost per unit is constant.
The indirect costs as per his budget projection are:

Indirect Costs	20,000 units (80% capacity) (₹)	22,500 units (90% capacity) (₹)	25,000 units (100% capacity) (₹)
Variable	80,000	90,000	1,00,000
Semi-Variable	40,000	42,500	45,000
Fixed	80,000	80,000	80,000

He received an export order for the product equal to 20% of its present operations. Additional packing charges on this order will be ₹ 1,000.
As a Management Accountant, Calculate the price to be quoted for the export order so as to give his a profit margin of 10% on the export price. 10

(b) What is 'competitive intelligence'? Discuss the role of Management Accountant in competitive intelligence process? 10

Answer:

2. (a)

Computation of Direct Cost:

		Per unit (₹)
Selling Price	₹ 4,00,000 ÷ 20,000 units	20
Less: Profit Margin	@ 20% on selling price i.e., on ₹ 20	4
Total Cost		16
Less: Indirect Costs	₹ 2,00,000 ÷ 20,000 units	10
Direct Cost		6

Statement showing Differential Cost for production of additional 4,000 units:

Production Units	**Present 20,000 (₹)**	**Proposed 24,000 (₹)**	**Differential 4,000 (₹)**
Direct Cost @ ₹ 6 per unit	1,20,000	1,44,000	24,000
Indirect Costs:			
Variable Cost @ ₹ 4 per unit	80,000	96,000	16,000
Semi-Variable	40,000	44,000	4,000
Fixed	80,000	81,000	1,000
Total Costs	3,20,000	3,65,000	45,000

Quotation for the Export Order (with a desired profit of 10% on Export Price)

	₹
Differential Cost	45,000
Add: Profit (10% of Export Price or 1/9 of Cost)	5,000
Export Price to be quoted	50,000

Export Price to be quoted per unit = ₹ 50,000 ÷ 4,000 units = ₹ 12.50.

2. (b)

Competitive Intelligence (CI): is the action of defining, gathering, analyzing and distributing Intelligence about products, customers, competitors and any aspect of environment needed to support executives and managers in making strategic decisions for an organizations. It is an ethical and legal business practice, as opposed to industrial espionage, which is illegal.

In CI, the focus is on the external business environment, incorporating external competitive and market forces into Strategic Planning. Further, the thrust in CI is to gather information, then convert it to intelligence and then to utilize it in business decision-making.

It essentially means understanding and learning what is happening in the world outside your business, so as to be as competitive as possible. It means learning as much as possible as soon as possible about your industry in general and your competitors. In short, CI empowers you to anticipate and face challenges head on.

Role of Management Accountant in Competitive Intelligence Process:

CI is a process of gathering data, creating information and making decisions. Management Accountants gather data, assimilate data into information and make decisions based upon information, frequently with their management counterparts.

Management Accountants may be actively involved in introducing a Competitive Intelligence Process in several ways, as indicated below:

- Indentifying the need for a new or improved competitive Intelligence process.
- Educating the top management and other senior managers about that need.
- Developing a plan along with cross-functional team members for designing, developing and implementing the new, improved Competitive Intelligence Practice, including its underlying architectures.
- Identifying the appropriate goods and techniques for conducing competitor analysis.
- Providing financial input, analysis and expertise to the Competitive Intelligence effort.
- Ensuring that the CI efforts are ties to the firm's goals, strategies, objectives and internal processes, as appropriate.
- Continually assessing the new, improved CI Process and its implications for the organization and continually improving the process.

CI may also be viewed as a Competitive Audit, a concept that the Management Accountants are familiar with. Management Accountants' training and experience make them well suited to the requirements, of the CI process.

3. (a) Timma Ltd., has the capacity of production of 80,000 units and presently sells 20,000 units at ₹ 50 each. The demand is sensitive to Selling Price and it has been observed that for every reduction of ₹ 10 in the Selling Price, the demand is doubled.

You are required to calculate:

(i) What would be the Target Cost at full capacity, if Profit margin of Sale is 10%?

(ii) What should be the Cost Reduction Scheme, if at present 40% of Cost is Variable, with the same % of Profit?

(iii) If the Rate of Return desired is 15%, what will be the maximum investment at full capacity? 2+3+3

(b) State the different steps to be followed while implementing Economic Value Added (EVA) process. 6

(c) State the different ways of improving EVA. 6

Answer:

3. (a)

(i) Target Cost at Full Capacity:

Selling Price per unit	₹ 50	₹ 40	₹ 30
Demand	20,000 units	40,000 units	80,000 units = Full Capacity

Hence, Target Cost at Full Capacity
= Sell Price less Profit Margin = ₹ 30 less 10% thereon.
= ₹ 27 per unit.

(ii) Determination of Target Cost Reduction:

		₹

(a)	Since present price is ₹ 50 per unit and Profit is 10% thereon, Present Cost per unit = ₹ 45, of which 40% is variable. So, Fixed Cost is 60% of ₹ 45 = ₹ 27 per unit So, Total Fixed Cost (27 × 80,000)	21,60,000
(b)	Variable Cost at Full Capacity [(40% of ₹ 45 per unit) × 80,000]	14,40,000
(c)	Estimated Cost at Full Capacity [{Fixed Cost (Constant at all levels) + Variable Cost} i.e., (a+b)]	36,00,000
(d)	Target Cost at Full Capacity [₹ 27 per unit for 80,000 units]	21,60,000
(e)	Cost Reduction Target/Scheme [Estimated Cost less Target Cost i.e., (c-d)]	14,40,000

(iii) Computation of Investment required:

		₹
(a)	PBT i.e., Profit at Full Capacity [(10% of ₹ 30) × 80,000 units]	2,40,000
(b)	Since ROCE desired is 15%, Maximum Required Investment = PBT/ROCE = ₹ 2,40,000 ÷ 15%	16,00,000

3. (b)

While implementing Economic Value Added (EVA), the following basic steps would be involved:

- Measurement
- Management System
- Motivation and
- Mindset.

- **Measurement:** Any company that wishes to implement EVA should institutionalize the process of measuring regularly. This measurement should be carried out after carrying out the prescribed accounting adjustment.
- **Management System:** The company should be willing to align its management system to the EVA process. The EVA based management system is the basis on which the company should take decision related to the choice of strategy, capital allocation, merger and acquisitions, divesting the business and goal setting.
- **Motivation:** The company should decide to implement EVA only if it is prepared to implement the incentive plan that goes with it. An EVA based incentive system, however, encourages managers to operate in such a way as to maximize the EVA, not just of the operations it oversees but of the company as a whole.
- **Mindset:** The effective implementation of EVA necessitates a change in the culture and mindset of the company. All the constituents of the organization need to be taught to focus on one objective i.e., maximizing EVA. This singular focus leaves no room for ambiguity and also it is not difficult for employees to know just what actions of theirs will create EVA and what will destroy it.

3. (c)

Different Ways of improving EVA are:

The broad ways to improve EVA are:

- Process Improvements
- Exploiting growth potential and
- Managing assets and restructuring.

- **Process Improvements:** It focuses on increasing the efficiency of operations, thereby, increasing the spread between the returns on capital employed and the cost of capital. This includes better management of net working capital.
- **Exploiting growth potential:** This denotes increasing the total capital employed by undertaking all positive NPV projects. If the spread between returns and cost of capital is positive, it will enhance EVA.
- **Managing assets and restructuring:** This emphasises on decreasing the exposure from the projects that are not yielding returns in excess of cost of capital.

4. (a) Mr. X is trying to decide whether to travel to Sri Lanka from New Delhi to negotiate the sale of a shipment of China novelties. He holds the novelties stock and is fairly confident but by no means sure that if he makes the trip, he will sell the novelties at price that will give him a profit of ₹ 30,000. He puts the probability of obtaining the order at 0.6.
If he does not make the trip, he will certainly not get the order.
If the novelties are not sold in Sri Lanka, there is an Indian customer, who will certainly buy them at a price that leaves him with a profit of ₹ 15,000 and his offer will be open till Mr. X returns from Sri Lanka.
Mr. X estimates the expenses of trip to Sri Lanka at a fabulous offer of only ₹ 2,500. He is however, concerned that his absence, even for only three days, may lead to production inefficiencies in the factory. These could cause him to miss the deadline on another contract, with the consequence that a late penalty of ₹ 10,000 will be invoked. Mr. X assesses the probability of missing the deadline under the circumstances at 0.4.
Further, he believes that in his absence, there will be a lower standard of house-keeping in the factory and the raw material and labour costs on the other contract will rise by about ₹ 2,000 above the budgeted figure.
Draw an appropriate Decision-tree for Mr. X's problem and using EMV as the appropriate criterion for decision, find the appropriate initial decision. 10

(b) Seema Ltd., has prepared the following budget for the year:

Levels of activity

Particulars	60% ₹	80% ₹
Raw Materials	30,00,000	40,00,000
Direct Wages	18,00,000	24,00,000
Factory overheads	32,00,000	36,00,000
Total	80,00,000	1,00,00,000

The policy of the company is to charge 25% on variable costs to cover profit. Raw material is in short supply and the company wants to utilize its available supply of raw materials in an optimum manner. Planned operating capacity is 80%.
The company has to execute a job, as per details given below:

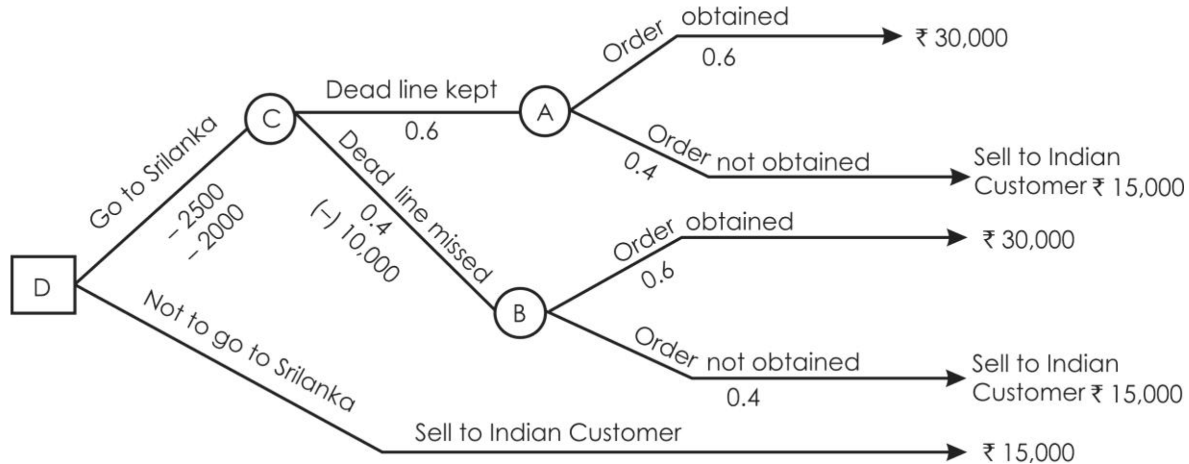
Raw Materials	(₹)	40,000
Direct Wages	(₹)	30,000

You are required to quote the price of the job, in accordance with the policy of the company. 10

Answer:

4. (a)

The Decision Tree is drawn below: Let us use 'the Roll-Back Technique' of solving the problem. Calculating EMV, by proceeding from right to left, we get:



	Go	**Not Go**
	30,000 × 0.6 = ₹ 18,000	15,000 × 1 = ₹ 15,000
	15,000 × 0.4 = ₹ 6,000	
At A	₹ 24,000	

Similarly at B =

30,000 × 0.6 + 15,000 × 0.4 = ₹ 24,000

At C = 24,000 × 0.6 + 24,000 × 0.4 – 10,000 × 0.4 = 14,400 + 9,600 – 4,000 = 20,000.

At D = Going to Sri Lanka option = 20,000 – 2,500 – 2,000 = 15,500.
Not going to Sri Lanka gives a return of ₹ 15,000 (by Selling to an Indian Customer.)

Conclusion: Mr. X should go to Sri Lanka.

4. (b)

Segregation of Overheads into Fixed and Variables:

	Activity	**Overheads (₹)**
	80%	36,00,00
	60%	32,00,000
Difference	20%	4,00,000
Or, For	1%	20,000(V)

At 80% activity, the variable cost would have been 80 × 20,000 = ₹ 16,00,000
But the Total Costs at this level is ₹ 36,00,000.
Hence, the Fixed Cost would be ₹ 36,00,000 – ₹ 16,00,000 i.e., ₹ 20,00,000.
Variable Overhead as % of Direct Wages = ₹ 16,00,000 / 24,00,000 × 100 = $66^2/_3$%.

At 80%	₹
Direct Materials	40,00,000
Direct Wages	24,00,000
Variable Overheads	16,00,000
Total Variable Cost	80,00,000
Profit = 25% of ₹ 80,00,000	20,00,000

Contribution = Fixed Costs + Profit = ₹ 20,00,000 + ₹ 20,00,000 = ₹ 40,00,000.
Raw Materials are in short supply.
Contribution ÷ Raw Material = ₹ 40,00,000 ÷ ₹ 40,00,000 = 100%.

Product Pricing:

	₹
Direct Materials	40,000
Direct Wages	30,000
Variable Overheads (66$^{2}/_{3}$% of Direct Wages	20,000
Contribution = 100% of Direct Materials	40,000
Selling Price =	1,30,000

SECTION B (20 Marks)
IT & Econometric tool in Performance Management
Answer* any two Questions, each *carrying 10 marks.

5. (a) What is 'Principal component Analysis' (PCA)? Briefly explain? 5

(b) After adopting total Productivity Maintenance, What types of benefit will your organization get? 5

Answer:

5. (a)

Principal Component Analysis (PCA): PCA is one of the techniques that reduces the data into two dimensions. It is a data decomposition technique. It is a method that reduces data dimensionality by performing a covariance analysis between factors. As such, it is suitable for data sets in multiple dimensions, such as a large experiment in gene expression.

Let us take an example that illustrates how PCA works with a micro array experiment: Suppose you are measuring 10,000 genes in 8 different patients. These values could form a matrix of 8 × 10,000 measurements. Now imagine that each of these 10,000 genes are plotted in a multi-dimensional space on a scatter plot consisting of 8 axes, 1 for each patient. The result is a cloud of values in multidimensional space. To characterize the trends exhibited by this data, PCA extracts directions, where the cloud is more extended. For instance, if the cloud is shaped like a football, the main direction of the data would be a mid-line or axis along the length of the football. This is called the first component or the principal component PCA will then look for the next direction, orthogonal to the first one, reducing the multidimensional cloud into a two-dimensional space.

Because it is hard to visualize multi-dimensional space, PCA, a popular multivariate technique, is mainly used to reduce the dimensionality of multi-attributes to two or three dimensions. PCA summarizes the variation in a correlated multi-attribute to a set of uncorrected components, each of which is a particular linear combination of the original variables.

5. (b)

Benefits from Total Productive Maintenance (TPM):

The following are some of the important benefits an organization is expected to reap:

- A set of new management goals will be developed by the management, using the skills and training provided during the implementation of TPM.
- Team-bonding and better accountability.
- Improved quality and total cost competitiveness.
- Productivity and quality team-training for problem-solving.
- Motivate people to function better all the time. Measure impact of defects, sub-optimal performance and downtime.
- Earlier detection of factors critical to maintaining equipment "uptime'.

6. (a) What is meant by the term "Strategy Mapping"? 5

(b) " 'The Malm Quist Index' (MI) is based on the concept of the production function. This is a function of maximum possible production, with respect to a set of inputs pertaining to capital and labour." – Discuss. 5

Answer:

6. (a)

Strategy Mapping:

A strategy map is a diagram that is used to document the primary strategic goals being pursued by an organization or management team. It is an element of the documentation associated with the Balanced Scorecard. And in particular is characteristic of the second generation of Balanced Scorecard designs that first appeared during the mid-1990s.

Strategy maps show:

- Each objective as text appearing within a shape (usually an oval or rectangle)
- Relatively few objectives (usually less than 20)
- Objectives are arrayed across two or more horizontal bands on the strategy map, with each band representing a 'perspective'
- Broad causal relationships between objectives shown with arrows that either join objectives together, or placed in a way not linked with specific objectives but to provide general euphemistic indications of where causality lies.

Strategy Maps are the communication tools used to know how the value is created for the organization. They show a logical and step-by-step connection between the various strategic objectives in the form of cause-and-effect chain. Generally speaking, improving performance in the objectives found in learning and growth perspectives (the bottom two rows) enables the organization to improve to its internal process perspective objectives, which in turn enables the organization to create desirable results in the customer and financial perspectives (the top two rows).

6. (b)

Malm Quist Index (MI): is a bilateral index that can be used to compare the production technology of two economies. It is named after Professor Sten Malmquist, on whose ideas, it is

based. It is also called the Malmquist Productivity Index.

The MI is based on the concept of the production function. This is a function of maximum possible production, with respect to a set of inputs pertaining to capital and labour. So, if S_a is the set of labour and capital inputs to the production function of Economy A and Q is the production function of Economy A, we could write $Q = f_a(S_a)$.

While the production function would normally apply to an enterprise, it is possible to calculate it for an entire region or nation. This would be called the aggregate production function.

To Calculate the Malmquist Index of economy A with respect to economy B, we must substitute the labour and capital inputs of economy A into the production function of B and vice-versa.

The formula for MI is as given below:

$MI = \sqrt{(Q_1Q_2) \div (Q_3Q_4)}$, where

$Q_1 = f_a(s_a)$
$Q_2 = f_a(s_b)$
$Q_3 = f_b(s_a)$
$Q_4 = f_b(s_b)$

Note that the MI of A with respect to B is the reciprocal of the MI of B with respect to A.
If the MI of A with respect to B is greater than 1, the aggregate production technology of economy A is superior to that of economy B.

7. Define the following terms in the context of Supply Chain Management: 2×5=10
(a) Activity Based Management
(b) Capacity Management
(c) Customer Relationship Management
(d) Customer Value
(e) Information Sharing

Answer:

7. (a)

Activity Based Management:

The use of activity-based costing information about the cost pools and drivers, activity analysis and business processes to identify business strategies; improve product design, manufacturing and distribution and removal of waste from operations.

7. (b)

Capacity Management:

The function of establishing, measuring, monitoring and adjusting limits or levels of capacity in order to execute all manufacturing schedules; i.e., the production plan, master production schedule, material requirements plan and dispatch list. Capacity Management is executed at four levels viz., Resource Requirements Planning, Rough-cut Capacity Planning, Capacity Requirements Planning and Input/Output Control.

7. (c)

Customer Relationship Management(CRM):

A marketing philosophy based on putting the customer first. It involves the collection and analysis of information designed for sales and marketing decision support to understand and support existing and potential customer needs. It includes account management, catalogue and order entry, payment processing, credits and adjustments and other functions.

7. (d)

Customer Value:

The Customer Value approach focuses on how people choose among competing suppliers, customer attraction and retention and market-share gains. By highlighting the best performer on each key buying factor, marketers obtain a market derived, empirical aggregate of each supplier's customer value proposition. Often the view from the marketplace differs from the organization's internally developed customer value proposition.

7. (e)

Information Sharing:

A strategic partnering relationship between suppliers and buyers is characterized by a willingness to be open and to share forecasted demand and cost data as well as the benefits resulting from the information sharing. Both parties in the relationship generally follow a continuous improvement philosophy towards total cost of material acquisition and ownership along with quality and service. Cost, quality and schedule information that is confidential is shared both ways between firms during the early and ongoing stages of design and during the production life-cycle of the supplying relationship. This openness exists because of the high degree of trust earned through multiple successful interactions between the two organizations.

SECTION C (20 Marks)

Enterprise Risk Management

Answer* any two Questions, each *carrying 10 marks.

8. "There are various Strategic Decisions for managing Risk." State these strategies and briefly explain each of them in three or four sentences. 10

Answer:

8.

Strategic Decision for Risk Management: The following are the different strategies that can be used for managing Risk:

- **Risk Handling**: In ideal Risk Management, a prioritization process is followed whereby risks with the greatest loss and the greatest probability of occurring are handled first and risks with lower probability loss are handled later.
- **Risk Reduction**: This strategy is attempted to decrease the quantum of losses arising out of a risky happening e.g., earthquake, storm, flood etc.. It involves methods that reduce severity of the loss arising from risk consequences.

Risk Reduction can be achieved through:
- Loss Prevention and
- Loss Control.

- **Risk Avoidance**: This is prevention and a proven strategy. This strategy results in complete elimination of exposure to loss due to a specific risk. It may involve avoidance of an activity, which is risky. It includes deliberate attempt on the part of the person taking risk decision not to perform an activity or not to accept a proposal, which is risk prone.

  This strategy can be approached in two ways:
  - Do not assume risk and
  - Discontinuation of an activity to avoid risk.

- **Risk Retention**: This strategy is adopted when risk cannot be avoided, reduced or transferred. It involves accepting the loss when it occurs by taking risky proposal or risky assignment where there are no other alternatives to avoid risk. It can be voluntary or involuntary action. When it is voluntary, it is retained through implied agreements. Involuntary retention occurs when the organization is unaware of the risk and faces it when it comes up.
- **Risk Transfer**: It means causing another party to accept the risk, typically by contract, it involves a process of shifting risk responsibility on others. Insurance is one type of risk transfer, which is widely used in common parlance.
- **Risk Hedging**: is a systematic process of reducing risk associated with an investment proposal or in some other assignments where risk is inevitable ie.,the risk is of such nature that it cannot be avoided altogether.
- **Risk Diversification**: It involves identifying both systematic and unsystematic risks. Systematic risk is inherent and is peculiar to the type of business/firm and can be reduced or diversified through functional level strategy. The unsystematic risk is external to the organization and is termed as 'market risk'. The identification of characteristics of market risk through statistical correlation 'beta', which is a measure of market risk, lends itself for manipulation through portfolio management This strategy is followed in reduction of risk of single portfolio by investing in shares, debentures, bonds, treasury bills etc., to reduce overall risk of the portfolio.
- **Risk Sharing**: Taking an insurance coverage for the exposure is the common method of sharing risk. By paying insurance premium, the company shares the risk with an insurance company. The Insurance company can also share its risk with other insurance companies by doing re-insurance.
- **Risk Pooling**: is the process of identification of separate risks and put them together in a single blanket, so that the monitoring, integrating or diversifying risk can be implemented.

9. "Just as diseases are identified by certain symptoms, Industrial Sickness too can be identified by certain symptoms." State the symptoms that act as indicators of Industrial Sickness. Suggest immediate remedial actions to mitigate Industrial Sickness. 10

Answer:

9.

"Just as diseases are identified by certain symptoms, Industrial Sickness too can be identified by certain symptoms."

The following symptoms act as indicators of Industrial Sickness:

- Continuous reduction in turnover.
- Piling up of inventory.
- Continuous reduction of net profit to sales ratio.
- Short term borrowings with a high interest rate.
- Continuous cash losses leading to erosion of tangible net worth
- Default in payment of interest on borrowings and defaults in repayment of term loan installment
- The 'Sundry Debtors' as well as the 'Sundry Creditors' keep growing and reaching a disproportionately high level.
- Approaching the banker for temporary overdraft at frequent intervals.
- High turnover of personnel, especially at senior levels.
- Change in accounting procedure with a view to 'window dressing'.
- Delay in finalization of accounts.

These symptoms act as leading indicators of sickness and if immediate remedial actions are not taken, the sickness will grow to the extent that the organization will find its natural death.

Immediate Remedial measures to mitigate Industrial Sickness:
The following Remedial actions are suggested to immediately mitigate Industrial Sickness:

- Steps to reduce Industrial Labour turnover.
- Control of Inventory, especially WIP inventories.
- Steps to improve profitability ratios.
- Generation of revenues from trading.
- Timely payment of interest on borrowings
- Timely repayment of term loans
- Control the figures of 'Sundry Debtors' and 'Sundry Creditors'.
- No window Dressing should be allowed.
- Timely finalization of accounts.

10. Write short notes on: **2.5×4=10**

(a) Business Process Improvement
(b) Different types of Corporate Risk
(c) Risk Management Process
(d) Risk Pooling

Answer:

10. (a)

Business Process Improvements (BPI):
BPI is a systematic approach to help an organization optimize its underlying processes to achieve more efficient results. It is the methodology that both Process Redesign and Business Process Reengineering are based upon. BPI has been responsible for reducing cost and cycle time by as much as 90% while improving quality by over 60%.

Process Improvement is an aspect of Organizational Development (OD) in which a series of actions are taken by a process owner to identify, analyze and improve existing business processes within an organization to meet new goals and objectives, such as increasing profits and performance, reducing costs and accelerating schedules. These actions often follow a specific methodology or strategy to encourage and ultimately create successful results.

Process improvement may include the restructuring of company training programs to increase

their effectiveness. Process Improvement is also a method to introduce process changes to improve the quality of a product or service, to better match customer and consumer needs.

10. (b)

Different types of Corporate Risk:

The different types of Corporate Risk are:

- Industry Risk
- Transition Risk
- Stagnation Risk
- Unique Competitor Risk
- Brand Risk
- Project Risk and
- Operational Risk.

Industry Risk: This risk arises when the Industry itself faces extinction suddenly, due to unavoidable reasons such as a fractured life and the consequent sudden death, mass customization, threats caused by internal rivalry among existing companies, inability to meet the stringent requirements of competition etc.,

Transition Risk: usually arises when technological obsolescence suddenly overtakes the company. Further the consumer behaviour has become an enigma due to the wide variation and aspiration of different customers. This wide variety in the requirements of customers is also one of the factors leading to the extinction of technology that is no longer relevant to the customer.

Stagnation Risk: This risk is associated with the stagnation of a company caused by a sudden fall in demand due to a recession. This risk has to be faced by almost all the industries in the country. Further when a company is exposed to such a risk, even fixed/committed costs cannot be recovered as the level of operations is usually far below the B.E. Point.

Unique Competitor Risk: This risk arises when a unique competitor enters the scene unexpectedly. This risk is a culmination of the big resources, high technology and the managerial skill that the unique competitor possesses.

Brand Risk: This risk is a very serious one as any company can grow and build its market share on the basis of its brand equity and brand loyalty.

Project Risk: In the 1990s, the Government of India devalued the Indian Rupee and as a result, many projects had taken the lower parity between Indian rupee and the American Dollar-resulting in the loss of viability of several projects, with many failing even to take off.

Operational Risk: is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This risk arises from execution of the normal operations of the company involving-people, systems and processes.

10. (c)

Risk Management Process:

Risk Management Process refers to the process of measuring or assessing risk and then developing strategies to manage risk. In this process, the following steps will help in minimizing the risk:

- **Step-1: Risk Identification and Assessment**: This step involves event identification and the

data collection process. Once risks are identified, they are assessed according to the key areas, impacted by the risk like People, mission, physical assets, financial assets and customer trust

- **Step-2: Risk Quantification and Measurement**: The next step is to Quantify and Maesure risks. This means risks according to probability and impact
- **Step-3: Risk Analysis, Monitor and Reporting**: The next step is risk analysis, monitoring and reporting. This will help one to get the big picture and decide on the approach to risk management
- **Step-4: Capital Allocation:** Risk Analysis, Monitoring & Reporting sends information to the top management of the organization to take strategic decisions. Capital Allocation plays key role in management decision-making.
- **Step-5: Risk Management and Mitigation**: After the above steps, the last step is to make strategic decisions to manage the risk in order to mitigate the risk.

10. (d)

Risk Pooling:

One of the forms of Risk Management mostly practiced by Insurance Companies, is Risk Pooling. Under this system, Insurance Companies come together to form a pool, which can provide protection to Insurance Companies against catastrophic risks such as floods, earthquakes etc., The term is also used to describe the pooling of similar risks that underlies the basic concept of Insurance. While Risk Pooling is necessary for Insurance to work, not all risks can be effectively pooled. In particular, it is difficult to pool dissimilar risks in a voluntary insurance market, unless there is a subsidy available to encourage participation.

Risk Pooling is an important concept in Supply Chain Management Risk Pooling suggests that demand variability is reduced if one aggregates demand across locations. It becomes more likely that high demand from one customer will be offset by low demand from another. This reduction in variability allows a decrease in safety stock and therefore reduces average inventory.

The basis for the concept of Risk Pooling is to share or reduce risks that no single member could absorb on their own. Hence, Risk Pooling reduces a firm's exposure to financial loss by spreading the risk among many companies.