FINAL EXAMINATION

GROUP IV

(SYLLABUS 2012)

SUGGESTED ANSWERS TO QUESTIONS

JUNE 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. **Sahni Auto Industries is a manufacturer and exporter of Auto parts with an annual turnover of Rupees one thousand crores. It employs about 2,000 persons in its factory in Punjab and its other offices in India and abroad. The personnel Administration and Human resources Department of the company is headed by Mr. Amit Kapoor, the Chief Personnel Manager.**

   Mr. Amit Kapoor, an Automobile Engineer joined the company 5 years ago as Product Development Manager. After a successful stint of 4 years as Product Development Manager, he was transferred to Personnel Administration and Human Resources Department as the Chief Personnel Manager as a part of Career development plan.

Mr. Vikas, MBA in Human Resources from a renowned Business school, joined the company as Personnel Manager only 3 months back. He reported to Mr. Amit Kapoor, the Chief Personnel Manager. He handled all routine personnel and industrial relations matters.

One day, during informal discussion with Mr. Amit Kapoor, Mr. Vikas suggested him of linking Human Resources Management with Company's strategic goals and objectives to further improve business performance and also to develop Organizational culture that fosters more innovative ideas. He also advocated creating abundant 'Social Capital' on the ground that people tend to be more productive in an environment which has trust and goodwill embedded in it rather than which is highly hierarchical and formal. Mr. Amit Kapoor disagreed with Mr. Vikas and told him that the role of Human Resources Department was only peripheral to the business and all his suggestions about its strategic role were beyond the purview of Personnel Administration and Human Resources Department.

After this, Mr. Vikas started having number of arguments with Mr. Amit Kapoor on several issues relating to personnel and industrial relations since he felt that a person with a degree in Human Resources Management, he was in a far better position to run Personnel Administration and Human Resources Department. Mr. Amit Kapoor, the Chief Personnel Manager had often shown his displeasure on Mr. Vikas's argumentative tendency and had made it known to the General Manager.

The General Manager called Mr. Amit Kapoor in his office to inform him that he has been selected for an overseas assignment. He further told him to find a suitable person as his successor, he even suggested Mr. Vikas as a possible candidate. Mr. Amit Kapoor, however, selected Mr. Balram, who was working as Training Manager in a Multinational Company for the last 5 years. Mr. Vikas soon started having arguments with Mr. Balram also over number of issues relating to industrial relations since he felt that he had no experience in handling industrial relations matters. Mr. Balram now realized that Mr. Vikas was trying to make things difficult for him. After a series of meetings with the General Manager, Mr. Balram eventually succeeded in convincing him to transfer Mr. Vikas to an office outside Punjab.

On learning about his impending transfer, Mr. Vikas wrote a letter to the General Manager giving details of various instances, when Mr. Balram had shown his incompetence in handling problematic situations. When asked for explanation by the General Manager, Mr. Balram had refuted almost all the allegations. The General Manager accepted his explanation and informed Mr. Vikas that most of his allegations against Mr. Balram were unwarranted and baseless. He further advised him to avoid confrontation with Mr. Balram. Mr. Vikas then wrote a letter to the Chairman repeating all the allegations against Mr. Balram.

On investigation, the Chairman found most of the allegations were true. He then called all the three-the General Manager, the Chief Personnel Manager and the Personnel Manager in his office and requested them to forget the past and henceforth to work in coordination with each other in an environment of Trust and Goodwill.

Required:

(a) Identify and discuss the major issues raised in the case.

(b) Comment on the recruitment of the two Chief Personnel Managers.

(c) Would you justify Mr. Vikas's argumentative tendency with the Chief Personnel Manager? Give reasons for your answer.

(d) Do you agree with suggestion offered by Mr. Vikas to link Human Resources Management with the company's strategic goals? If yes, suggest prominent areas where Human Resources Department can play role in this regard. 6+4+5+5

Answer:

1. (a)

The first major issue raised in the case pertains to failure of the administration to realize the significant role Personnel Administrative and Human Resources Department can play in corporate strategy. This is evident from the remarks made by Mr. Amit Kapoor - the Chief Personnel Manager that the role of his department was only peripheral to company business and the strategic role playing was beyond its purview. He advised his Personnel Manager Mr. Vikas to confine his functions to routine personnel and industrial relation matters. The company has also failed to follow the principle of matching an appropriate candidate to the job requirements when it comes to appointment of Chief Personnel Manager. The company decided to send Mr. Amit Kapoor an automobile engineer from manufacturing department to Personnel Administration and Human Resources Department as head without realizing that latter job needed a person with qualification and experience in management of human resources.

The company had almost adopted a similar attitude when it appointed Mr. Balram as replacement of Mr. Amit Kapoor. Eyen there seems to be lack of clarity in the career development plans of the company as Mr. Amit Kapoor a qualified automobile engineer is transferred to the personnel department. The whole idea behind career development plans is to develop a person's skills to match with his present job with the job he would be expected perform in future.

The company has also failed to pay attention in developing organization culture in which superior-subordinate relationship, team work are strengthened to contribute to professional well-being, motivation and pride of employees. This become clear when the Personnel Manager's frequent arguments with the Chief Personnel Manager are not taken seriously and Mr. Vikas is just let off free without any strictures or warning for his behaviour by the higher authorities.

There is also need for a system to encourage social networking amongst different employees in the organization which can help to create "Social Capital" as was made clear by Mr. Vikas when he suggested Mr. Amit Kapoor to take necessary measure in building 'Social Capital'. Even the transfer policies of the company need improvement. Mr. Amit Kapoor is transferred to Personnel Administration and Human Resources Department, and later to different assignment at company's overseas office.

Even the General Manager had agreed to transfer Mr. Vikas to another office of company outside Punjab simply at the insistence of Mr, Balram, &e Chief Personnel Manager.

1. (b)

On the matter of appointment of Chief Personnel Manager and in particular of Mr. Amit Kapoor, the company ignored to match the qualification, experience and merit of the candidate with the job description and profile. The company should have recruited a person with degree in human resource management with adequate work experience to the position of the Chief Personnel Manager. Practically, the same mistake was committed in the appointment of Mr, Balram who had essentially experience of working as a Training Manager. In both the cases persons appointed lacked the needed qualification and experience for the top job in the personnel department. The direct fallout of this was that Mr. Vikas, the Personnel Manager did not have faith in the competence of his superior and he had frequent arguments whenever he differed with them in manner in which they handled some important issues relating to the industrial relations.

1. (c)

Mr, Amit Kapoor the Chief Personnel Manager did not possess any formal degree in personnel management and industrial relations. However, this did not give any right to Mr. Vikas, Personnel Manager who reports to him to have frequent arguments on the manner of handling issues relating to personnel and industrial relations. If at all Mr. Vikas had some serious differences with Mr. Amit Kapoor and later with Mr. Balram, who succeeded Mr. Amit Kapoor, he should have brought his view points to their notice in a more dignified manner keeping in view the hierarchy of the department.

There could be two possible reasons for this tendency of Mr. Vikas. First, he appears to have complex that he is superior on account of his relevant qualification and as a result he developed ego. Secondly, it also seems that Mr. Vikas was rather impatient to rise in the career ladder and become the Chief Personnel Manager without gaining much work experience. To achieve this end, he wanted to belittle the Chief Personnel Managers on every opportunity that came his way. In any case, the argumentative tendencies tantamount to indiscipline and insubordination and cannot be justified.

On the contrary, the top management should have sought his explanation on his frequent arguments with Chief Personnel Managers.

1. (d)

Human resources policies and plans deal with the most precious resources of an organization. It is the people who carry out the various functions in production, marketing, finance, etc. and the success of an organization depends upon the quality of people selected to their functions.

This presupposes an integrated approach towards human resources functions and overall business functions of an organization. The human resources management practices of an organization can be important sources of competitive edges.

In this context human resources manager / department can play an important strategic role in the following important areas:

- The human resources management must be able to lead people and organization towards desired goals and direction involving people right from the beginning.
- The human resources management can also help developing core competency by the firm. A significant role can also be played in building a highly committed and competent work force.
- The human resources management can also help in developing healthy work ethics and culture and create an atmosphere of trust and goodwill to encourage creative and innovative ideas. Jobs can be redesigned to make them more challenging and rewarding.

2. Sure Success & Co is a team of professionals engaged in coaching the students of CMA Final Examinations. They offer coaching facilities in the main cities of the country. Though they have been in this profession for a long time, there is a lot of competition from many other coaching centres.

You are required to design a Balanced Score Card for Sure Success to readily read the parameters and implement its performance. 20

Answer:

2. The Balanced Score Card suggests that we view the organization from 4 perspectives and to develop metrics, collect data and analyze it relative to each of the following perspectives:

(i) **Customer Perspectives:** Recent management philosophy has shown an increasing realization of the importance of customer focus and customer satisfaction in any business. This is the leading indicator. If the customers are not satisfied, they will eventually find other suppliers that will meet their needs. In developing metrics for satisfaction, customers should be analyzed in terms of customers and the kinds of processes for which we are providing a product or service to those customer groups.

(ii) **Financial Perspectives/Owner's Perspectives:** There is always the traditional need for financial data. Timely and accurate funding data will always remain to be a priority and the managers will do whatever necessary to provide it.

(iii) **Learning &Innovative Perspectives:** This perspective includes employees training and the corporate cultural attitudes related to both individual and corporate self-improvement. In all organization, People are the only repository of knowledge and remain the main resource.

(iv) **Internal Business Perspectives:** Metrics based on this perspectives allow the managers to know how well their business is running and whether its products and services conform to customer requirements. These metrics have to be carefully designed by those who know these processes most intimately.

Based on the above, we have designed a Balance Score Card for the Coaching Centre namely Sure Success & Co., as per below:

Perspectives	Key Performance Indicator	Target	Actual	Deviation
i. Customer Perspective (Customers are the Students and their Parents)	No. of Students enrolled No. of Passes per class No. of marginal failures No. of good students who have failed No. of rank holders No. of Students who drop out midway Increase in Student Strength over last period No. of cancelled classes No. of delayed classes due to late coming of faculty			
ii. Financial Perspectives/ Owners' Perspectives	Revenue per person Gross Revenue Direct Expenses-like Study material, Remuneration Rental of the premises Gross and net margin Returns after taxes Growth of returns			
iii. Learning and Innovation Perspectives	New subjects offered E-learning growth Video lessons offered No. of faculty added Capital/Infrastructure expenditure Training & Development of Faculty			
iv. Internal Business	Average no- of hrs/session. No. of sessions Seating conveniences			-

Perspectives	Optimality of batch size Effectiveness of batch size			

The Balanced Score Card Implementation process is quite simple in so far as it involves

- Agreeing to a set of performance measures as per above.
- Agreeing to a performance targets for each measure
- Recording actual performance for each performance measure and
- Regularly reporting and acting on any performance deviation.

3. (a) Define 'Target Cost'. List the six key principles in Target Costing? 1+6

(b) XYZ Co. Ltd. is a manufacturing company and sells its product at ₹ 1,000 per unit. Due to competition, its competitors are likely to reduce their price by 15%. XYZ Co. Ltd., wants to respond to this by aggressively cutting their price by 20% and expects that the present volume of 1,50,000 units p.a. will increase to 2,00,000. Further XYZ Co. Ltd. wants to earn a 10% target profit on sales.

Based on a detailed value engineering study, the comparative position is as given below:

Particulars	Existing (₹)	Target (₹)
Direct material cost per unit	400	385
Direct manufacturing labour per unit	55	50
Direct machinery costs per unit	70	60
Direct manufacturing costs per unit	525	495
Manufacturing Overheads:		
No. of Orders (₹ 80 per order)	22,500	21,250
Testing hours (₹ 2 per hour)	45,00,000	30,00,000
Units reworked (₹ 100 per unit)	12,000	13,000

Manufacturing Overheads are allocated, using relevant cost drivers. Other Operating costs per unit for the expected volume are estimated as per below:

Research and design	₹ 50
Marketing and customer service	₹ 130
	₹ 180

Required:

(i) Calculate target costs per unit and target costs for the proposed volume showing break-up of different elements

(ii) Prepare target product profitability statement 6+7

Answer:

3. (a)

Target costing is a process of determining the actual cost price of any product or service after considering the desired profit margin behind the same. A Target cost, is thus the allowable amount of cost that can be incurred on a product and still earn the required profit from that product. It is a market-driven cost that is computed before a product is produced.

The six key principles in Target Costing are as listed below:

(i) Price-led Costing (i.e., Target Price less desired mark-up = Target costs)

(ii) Customer Focus

(iii) Focus on design of Products and Processes

(iv) Cross-functional teams

(v) Life-Cycle Cost Reduction

(vi) Value-chain involvement.

Answer:

3. (b) (i)

Target Selling Price: ₹ 1,000 less 20%	₹ 800
Less: Target profit margin(10%)	₹ 80
Target Costs per unit	₹ 720

The break-up of ₹ 720 per unit is as follows:

Target Costs per unit

Particulars		Per unit (₹)
Direct Materials		385
Direct Manufacturing labour		50
Direct machining costs		60
Direct manufacturing costs		495
Add: Manufacturing overheads:		
Ordering and receiving (21250 × ₹ 80) ÷ 2,00,000	8.50	
Testing and inspection (30,00,000× ₹ 2) ÷ 2,00,000	30.00	
Rework (13,000 × ₹ 100) + 2,00,000	6.50	45
Total manufacturing costs		540
Other operating costs:		
Research and design	50.00	
Marketing and customer service	130.00	180
Full Product Costs		720

(ii) Target Product Profitability

Particulars	**Per unit (₹)**	**2,00,000 units (₹)**
1. Sales	800	16,00,00,000
2. Costs of goods sold:		
Direct Materials	385	7,70,00,000
Direct Labour	50	1,00,00,000
Direct machining costs	60	1,20,00,000
	495	9,90,00,000
Manufacturing overheads	45	90,00,000
	540	10,80,00,000
3. Gross margin (1 -2)	260	5,20,00,000
4. Operating costs:		
Research and Design	50	1,00,00,000
Marketing and customer service	130	2,60,00,000

	180	3,60,00,000
5. Operating Profit (3-4)	80	1,60,00,000

4. (a) What is 'Transfer Pricing'? Discuss on the 'Transfer Pricing Practices'? 2+4

(b) ABC Ltd., has two divisions A and B. Division-A is currently operating at full capacity. It has been asked to supply its product to Division-B. Division-A sells its product to its regular customers for ₹ 30 each. Division-B (Currently operating at 50% capacity) is willing to pay ₹ 20 each for the component produced by division-A (this represents the full absorption cost per component at Division-A). The components will be used by Division-B in supplementing its main product to conform to the need of special order. As per the contract terms of sale, the buyer calls for re-imbursement of full cost to Division-B Plus 10%.

Division-A has a variable cost of ₹ 17 per component. The cost per unit of Division-B subsequent to the buying part from Division-A is estimated as per below:

Particulars	**₹**
Purchased parts-Outside vendors	**90.00**
Purchased part-Division-A	**20.00**
Other Variable Costs	**50.00**
Fixed Overheads and administration	**40.00**
	200.00

The company uses return on investment in the measurement of Divisional and Division Manager's performance.

Required:

(i) As a manager of Division-A, would you recommend sales of your output to Division-B at the stipulated price of ₹ 20?

(ii) Would it be in the overall interest of the company for Division-A to sell its output to Division-B?

(iii) Suggest an alternative transfer price and show how could it lead to goal congruence? 4+4+6

Answer:

4. (a)

When a company is organized into more than one division and if one division supplies its finished output as an input to another division, there raises the question of 'Transfer Pricing'. 'Transfer Pricing', is the price at which the supplying division prices its transfer of output to the user division. It is different from the normal price in that both divisions are a part of the same organization and therefore there is only an internal transfer and not a sale.

Transfer Pricing Practices: There is a large amount of documented sources on the transfer pricing policies used by companies all over the world. These studies have documented various aspects of transfer. Pricing Policies such as-

- Its role as an overall component of reporting and control system in companies.
- The effect of transfer pricing on intra corporate conflicts and
- Variations in transfer pricing policies across the world.

A brief summary of transfer pricing practices is as follows:

(i) Companies tend to look at transfer pricing not just as a mere accounting exercise but as a tool in policy formulation towards achievement of corporate objectives,

(ii) Transfer pricing acts as a major source of political conflict within the organization and this takes place in respect of the method used for this purpose.

(iii) Companies, tend to use a variety of transfer pricing methods.

(iv) International companies use conscious manipulation of transfer pricing as an instrument of maximizing achievement of corporate goals.

Answer:

4. (b)

(i) As manager of Division-A, I would not recommend sales at ₹ 20 per unit to Division-B. The division is already operating at its full capacity and the market is presumably absorbing all its output at ₹ 30 per unit. The internal transfer made to Division-B, hence would reduce its profit (by ₹ 10 per unit) as well as the ROI.

(ii) Decision Analysis (Whether to transfer part from Division-A to Division-B at ₹ 20 per unit or not).

Particulars	Sold externally (₹)	Transferred to Division (₹)
Sale Price (Division-A)	30.00	
Sale Price (Division-B) (₹ 200 +10%)		220.00
Less relevant/Incremental cost: For part of Division-A	17.00	17.00
Purchased parts from outside		90.00
Other variable costs		50.00
Profit per unit	13.00	63.00

Yes. It will be in the overall interest of the company that transfer takes place, as it would augment the company's profit by ₹ 50 per unit. (₹ 63 - ₹ 13).

iii. Dual Price basis of effecting transfer is the most appropriate. In this case, the relevant transfer price will be ₹ 30.00(sale) so far as Division-A is concerned and ₹ 20 (purchase) so far as Division-B is concerned, it will keep the profits of division unaffected and will facilitate the utilization of the idle capacity of Division -B, as also its profit.

Particulars	₹
Sale price (₹ 210 + 10%)	231.00
Less: Costs (₹ 90 + ₹ 30 + ₹ 50)	170.00
	61.00

SECTION B (20 Marks)

IT & Econometric tool in Performance Management

You are to answer* any two Questions, *carrying 10 marks.

5. (a) State the problems that are to be addressed by Supply Chain Management. 5

(b) Discuss the potential impact of Computers and MIS on different levels of management. 5

Answer:

5. (a)

Supply Chain Management must address the following problems.

- Distribution Network Configuration; Number, location and network missions of suppliers, production facilities, distribution centres, warehouses, cross-docks and customers.
- Distribution Strategy: Questions of operating control (centralized, decentralized or shared); delivery scheme, e.g., direct shipment, pool point shipping, cross docking, direct store delivery (DSD), closed loop shipping; mode of transportation, e.g., motor carrier, including truckload, Less than truckload (LTL), parcel; railroad; inter-modal transport, including trailer on flatcar (TOFC) and container on flatcar (COFC); ocean freight; airfreight; replenishment strategy (e.g., pull, push or hybrid); and transportation control (e.g., owner-operated, private carrier, common carrier, contract carrier, or third-party logistics (3PL).
- Trade-Offs in Logistical Activities: The above activities must be well coordinated in order to achieve the lowest total logistics cost Trade-offs may increase the total cost if only one of the activities is optimized. For example, full truckload (FTL) rates are more economical on a cost per pallet basis than LTL shipments. If, however, a full truckload of a product is ordered to reduce transportation costs, there will be an increase in inventory holding costs which may increase total logistics costs. It is therefore imperative to take a systems approach when planning logistical activities. These trades-offs are key to developing the most efficient and effective Logistics and SCM strategy.
- Information: Integration of processes through the supply chain to share valuable information, including demand signals, forecasts, inventory, transportation, potential collaboration, etc.
- Inventory Management: Quantity and location of inventory, including raw materials, work-in-process (WIP) and finished goods.
- Cash-Flow: Arranging the payment terms and methodologies for exchanging funds across entities within the supply chain, is fully recurrent artificial network where every basic building block (artificial neuron) is directly connected to every other basic building block in all direction.

Answer:

5. (b)

The potential impact of computers on top-level management may be quite significant. An important factor which may account for this change is the fast development in the area of computer science. It is believed that in future computers would be able to provide simulation models to assist top management in planning their work activities. For example, with the help of a computer it may be possible in future to develop a financial model by using simulation technique, which will facilitate the executives to test the impact of ideas and strategies formulated on future profitability and in determining the needs of funds and physical resources.

Futurists believe that top management will realize the significance of techniques like Simulation, Sensitivity Analysis and Management Science. The application of these techniques to business problems with the help of computers would generate accurate, reliable, timely and comprehensive information to top management. Such information would be quite useful for the purpose of managerial planning and decision-making. Computerized MIS will also influence in the development, evaluation and implementation of a solution to a problem under decision making process.

Potential Impact of Computers and MIS on middle management level will also be significant. It will bring a marked change in the process of their decision-making. At this level, most of the decisions will be programmed and thus will be made by the computer, thereby drastically reducing the requirement of middle level managers. For example, in the case of inventory control system, computers will carry records of all items in respect of their purchase, issue and balance. The re-order level, re-order quantity etc., for each item of material will also be stored in computer after its predetermination. Under such a system, as soon as the consumption level of a particular item of material will touch reorder level, computer will inform for its purchase immediately.

The impact of Computers and MIS today at supervisory management level is maximum. At this level, managers are responsible for routine, day-to-day decisions and activities of the organization which do not require much judgment and discretion. In a way, Supervisory manager's job is directed more towards control functions, which are highly receptive to computerization. Potential impact of computers and MIS on supervisory level will completely revolutionize the working at this level Most of the controls in future will be operated with the help of computers. Even the need of supervisory managers for controlling the operations will be substantially reduced. Most of the operations/activities now performed manually will be either fully or partially automated.

6. (a) "Government can, however, play an important role in examining the economic and social impact of e-commerce technologies and in promoting understanding and application of these technologies throughout Indian industries and communities".— Describe any 5 roles of the government. 5

(b) State the Technological and Operational factors of e-commerce. 5

Answer:

6. (a)

Government can, however, play an important role in examining the economic and social impact of ecommerce technologies and in promoting understanding and application of these technologies throughout Indian industries and communities,

(i) Facilitating market access and business opportunities, especially for small, medium, and micro enterprises (SMMEs), on a national and global scale,

(ii) Providing educational and skills development resources,

(iii) Supporting the rapid deployment of necessary infrastructure,

(iv) Facilitating the development of MPCCs as vibrant seeding points for community knowledge and wealth creation, above and beyond the provision of the latest ICTs.

(v) Developing "model use" programmes for the dissemination of government information and services using e-commerce platforms, e.g. for electronic tender processes,

(vi) Supporting necessary transitions in the labour force due to technological and industrial transformation,

(vii) Ensuring equity in the availability of opportunities and benefits, in the context of the overall development of Indian rural community.

Answer:

6. (b)

Technical and Operational Factors of E-commerce

(i) Protocol (Standards) Making Process A well-established telecommunications and Internet infrastructure provides many of the necessary building blocks for development of a successful and vibrant ecommerce marketplace.

(ii) Delivery Infrastructure Successful e-commerce requires a reliable system to deliver goods to the business or private customer,

(iii) Availability of Payment Mechanisms Secure forms of payment in e-commerce transactions include credit cards, checks, debit cards, wire transfer and cash on delivery,

(iv) General Business Laws The application of general business laws to the Internet will serve to promote consumer protection by insuring the average consumer that the Internet is not a place where the consumer is a helpless victim,

(v) Public Attitude to E-commerce - The public attitude toward using e-commerce in daily life is a significant factor in the success of e-commerce.

(vi) Business Attitude to E-commerce - The willingness of companies to move away from traditional ways of doing business and develop methods and models that include e-commerce is essential.

7. (a) What are the key roles required for successful implementation of "Six Sigma"?

(b) Explain about the "Dashboard". 5+5

Answer:

7. (a)

Six Sigma identifies several key roles for its successful implementation. They are:

(i) Executive Leadership includes CEO and other key top management team members. They are responsible for setting up a vision for Six Sigma implementation. They also empower the other role holders with the freedom and resources to explore new ideas for breakthrough improvements.

(ii) Champions are responsible for the Six Sigma implementation across the organization in an integrated manner. The Executive Leadership draws them from the upper management. Champions also act as mentors to Black Belts. At GE this level of certification is now called "Quality Leader".

(iii) Master Black Belts, identified by champions, act as in-house expert coaches for the organization on Six Sigma. They devote 100% of their time to Six Sigma. They assist champions and guide Black Belts and Green Belts. Apart from the usual rigour of statistics, their time is spent on ensuring integrated deployment of Six Sigma across various functions and departments.

(iv) Experts: This level of skill is used primarily within Aerospace and Defence Business Sectors. Experts work across company boundaries, improving services, processes, and products for their suppliers, their entire campuses, and for their customers. Raytheon Incorporated was one of the first companies to introduce Experts to their organizations. At Raytheon, Experts work not only across multiple sites, but across business divisions, incorporating lessons learned throughout the company.

(v) Black Belts operate under Master Black Belts to apply Six Sigma methodology to specific projects. They devote 100% of their time to Six Sigma. They primarily focus on Six Sigma project execution, whereas Champions and Master Black Belts focus on identifying projects/functions for Six Sigma.

(vi) Green Belts are the employees who take up Six Sigma implementation along with their other job responsibilities. They operate under the guidance of Black Belts and support them in achieving the overall results.

(vii) Yellow Belts are employees who have been trained in Six Sigma techniques as part of a corporate-wide initiative, but have not completed a Six Sigma project and are not expected to actively engage in quality improvement activities.

Answer:

7. (b)

Dashboard In information technology.

A dashboard is a user interface that, somewhat resembling an automobile's dashboard, organizes and presents information in a way that is easy to read. However, a computer dashboard is more likely to be interactive than an automobile dashboard (unless it is also computer- based). To some extent, most graphical user interfaces (GUIs) resemble a dashboard. However, some product developers consciously employ this metaphor (and sometimes the term) so that the user instantly recognizes the similarity.

Some products mat aim to integrate information from multiple components into a unified display refer to themselves as dashboards. For example, a product might obtain information from the local operating system in a computer, from one or more applications that may be running, and from one or more remote sites on the Web and present it as though it all came from the same source. Hewlett Packard developed the first such product, which began as a tool for customizing Windows desktops. Called Dashboard, the HP product was subsequently acquired by Borland and then a company called Starfish, Microsoft's Digital Dashboard tool incorporates Web-based elements (such as news, stock quotes, and so on) and corporate elements (such as e-mail, applications, and so on)into Outlook. Dashboards may be customized in a multitude of ways and named accordingly, generally, for example as a general corporate or enterprise dashboard, or more specifically, as a CIO or CEO dashboard.

SECTION C (20 Marks)

Enterprise Risk Management

You are to answer* any two Questions, *carrying 10 marks.

8. (a) In today's environment, financial firms operate in increasingly complex, competitive and global challenging market'. In the light of Basel II, can you briefly describe the various risks prevalent in the financial services. 5

(b) 'Risk Management Process refers to the process of measuring or assessing risk and then developing strategies to manage risk'. Discuss the steps, which are taken to minimize the risk; 5

Answer:

8. (a)

In the light of Basel II Guidelines, the following risks are identified in banking and financial sectors:

(i) **Credit Risk:** Risk resulting from uncertainty in counterparty's ability or willingness to meet its contractual obligations, e.g., a bank gives a house-building loan to a customer and his default triggers a total or partial financial loss to the bank.

(ii) **Operational Risk:** Risks associated with their back office operations - what came to be called operational risks (i.e., risks other than credit or market risks). Bank office staffs fails to catch a discrepancy between a reported trade and a confirmation from the counterparty. Ultimately, the trade could be disputed running into litigation and causing a loss.

(iii) **Market Risk:** Such a risk arises due to uncertainty in the future market value of a portfolio of assets and/or liabilities and possible decline in value.

Market risk exists in many forms some of which are as follows: Liquidity risk: It is a financial risk from a possible loss of liquidity. There are two types of liquidity risks:

(i) **Specific Liquidity Risk** - it is the risk that particular firms will loss liquidity. This might happen if the firm's credit rating fell or something else happened which might cause counterparties to avoid trading with or lending to the firm, and

(ii) **System Liquidity Risk** - This affects all participants in the market. It is the risk that entire markets will loss liquidity. Financial markets tend to loss liquidity during the periods of crisis or high volatility.

Answer:

8. (b)

Risk Management Process refers to the process of measuring or assessing risk and then developing strategies to manage risk. In the risk management, the following steps are taken up to minimize the risk;

Step 1: Risk Identification and Assessment

This step involves event identification and data collection process. The institution has to put in place a system of capturing information either through key risk drivers (KRIs) or through a rating system. Once risks are identified, combine like risks according to the following key areas impacted by the risks — people, mission, physical assets, financial assets, and customer/ stakeholder trust

Step 2: Risk Quantification and Measurement

The next step is to Quantify and Measure risks-tins means Rate risks according to probability and impact. Various standard tools are used by financial institutions to measure risk and understand their impact in terms of capital or its importance to the organization through a scoring technique.

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 decided 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 step, the last step is to make strategic decisions to manage the risk in order to mitigate fee risk.

9. 'To be effective, any Enterprise Risk Management (ERM) implementations should be integrated with strategy-setting'. Do you agree? Give your views bringing out the basic elements of ERM and the reasons why ERM is implemented. 1+4+5

Answer:

9.

"To be effective, any Enterprise Risk Management (ERM) implementations should be integrated with strategy-setting". To my mind, this statement is true.

In today's challenging business environment, opportunities and risks are constantly changing, giving rise to the need for identifying, assessing, managing and monitoring the organization's business opportunities and risks. This, in turn, necessitates establishing the linkage between the opportunities and risk while managing the business. This requirement is addressed by ERM, which redefines the value proposition of risk management by elevating its focus from the 'tactical' to the strategic.' ERM is about designing and implementing capabilities for managing the risks that matter. In the light of this, the statement is correct and therefore acceptable.

Basic Elements of ERM:

The following are the basic element of ERM;

(i) A process, ongoing and flowing through an entity.

(ii) Effected by people at every level of an organization.

(iii) Applied in strategy setting.

(iv) Applied across the enterprise, at every level and unit and includes taking an entry-level view of risk.

(v) Designed to identify potential events affecting the entity and manage risk within the risk appetite.

(vi) Able to provide reasonable assurance to an entity's management.

(vii) Geared to the achievement of objectives in one or more separate but overlapping categories. It is a means to an end, not an end in itself.

Need for Implementation of ERM

ERM needs to be implemented for the following reasons:

(i) Reduce unacceptable performance variability.

(ii) Align and integrate varying views of risk management

(iii) Build confidence of investment community and stakeholders,

(iv) Enhance corporate governance.

(v) Successfully respond to a changing business environment

(vi) Align strategy and corporate culture.

Traditional risk management approaches are focused on protecting the tangible assets reported on a company's Balance Sheet and the related contractual rights and obligations. The emphasis of ERM, however, is on enhancing business strategy. The scope and application of ERM is much broader than protecting physical and financial assets. With an ERM approach, the scope of risk management is enterprise-wide and the application of risk management is targeted to enhancing as well as protecting the unique combination of tangible and intangible assets comprising the organization's business model.

10. (a) Define the term 'Risk Management'. State briefly its basic objectives. 2+3

(b) What are the commonly used techniques of 'Artificially Intelligent Expert System (AIES) Models' in Corporate Bankruptcy Prediction? 5

Answer:

10. (a)

Definition of Risk Management

Risk management is the process of measuring or assessing risk and developing strategies to manage it. Risk management is a systematic approach in identifying, analyzing and controlling areas or events with a potential for causing unwanted change. It is through risk management that risks to any specific program are assessed and systematically managed to reduce risk to an acceptable level.

Risk management is the act or practice of controlling risk. It includes risk planning, assessing risk areas, developing risk handling options, monitoring risks to determine how risks have changed and documenting overall risk management program. Risk management is a systematic approach to setting the best course of action under uncertainty by identifying, assessing, understanding, acting on and communicating risk issues.

Objectives of Risk Management

Risk management basically has the following objectives:

(i) Anticipating the uncertainty and the degree of uncertainty of the events not happening the way they are planned.

(ii) Channelizing events to happen the way they are planned.

(iii) Setting right, at the earliest opportunity, deviations from plans, whenever they occur.

(iv) Ensuring that the objective of the planned event is achieved by alternative means, when the means chosen proves wrong.

Answer:

10. (b)

The following are the most commonly used techniques of "Artificially Intelligent Expert System (AIES) Models in

Corporate Bankruptcy Prediction:

(i) **Recursively Partitioned Decision Trees (Inductive Learning Model):** Inductive Learning is one form of supervised learning. An inductive learning programme is able to learn from examples by a process of generalization. Many human experts also learn in this way. Decision Tree is one of the ways of Inductive Learning.

(ii) **Case-based Reasoning (CBR) Model:** Like human experts, CBR solves a new classification programme with the help of previously solved cases in the same domain of knowledge. A case, in the context of CBR, would consist of a contextual knowledge mat represented an experience.

(iii) **Neural Networks (NN) :** Although capable of outperforming human brain in basic arithmetic calculations, computers are certainly inferior when it comes to tasks involving symbolic recognition like signs of bankruptcy in a firm. The major task of any NN is to determine corporate weights to interconnection of different nodes. Technically, this process of mapping is termed as 'convergence'.

(iv) **Generic Algorithms (GA):** based on the idea of genetic inheritance and Darwinian theory of natural evolution (survival of the fittest) GA work as a stochastic search technique. It performs its search for optimal solution to the problem posed from a large and complicated space of solutions.

GAs are usually explained with the help of vocabulary, inevitably, borrowed from natural genetics, GAs executes this search process in three phases.

(v) **Rough Sets Models:** In a rough set model, inadequate knowledge about the objects is presented in the form of an information table. Rows, columns and entries of the table are respectively represents the following: 'objects', 'attributes' and 'attributes values'. In its application to the case of corporate bankruptcy prediction, a rough sets model collects and presents the available information on company to be classified as bankrupt or healthy in an information table.