

CBCS SCHEME

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18EE51

Fifth Semester B.E. Degree Examination, Jan./Feb. 2023 Management and Entrepreneurship

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Explain briefly the management functions. (10 Marks)
b. Discuss in detail roles of manager. (10 Marks)

OR

- 2 a. Explain the types of decisions. (10 Marks)
b. Explain the steps involved in planning. (10 Marks)

Module-2

- 3 a. Briefly explain principles of organization. (10 Marks)
b. Discuss the importance of staffing. (04 Marks)
c. Explain briefly the functions of staffing. (06 Marks)

OR

- 4 a. Explain briefly the characteristics of motivation. (06 Marks)
b. Write a note on positive and negative motivation. (06 Marks)
c. Explain the steps involved in controlling. (08 Marks)

Module-3

- 5 a. Briefly explain the importance of entrepreneurship. (10 Marks)
b. Give the detailed classification of entrepreneurs. (10 Marks)

OR

- 6 a. Explain the stages in entrepreneurial process. (10 Marks)
b. Discuss the problems faced by entrepreneurs. (10 Marks)

Module-4

- 7 a. Discuss the role of small scale Industry in economic development. (10 Marks)
b. Discuss the problems faced by small scale Industries. (06 Marks)
c. Write a note on impact of Globalization on small scale industries. (04 Marks)

OR

- 8 a. Mention the central agencies that provide support to S.S.I. (06 Marks)
b. Discuss the impact of WTO/GATT on S.S.I. (09 Marks)
c. Mention the reasons for sickness in S.S.I. (05 Marks)

Module-5

- 9 a. Explain briefly the contents of a good project report. (10 Marks)
b. Discuss Market analysis and technical analysis towards project analysis. (10 Marks)

OR

- 10 a. Discuss key point to be considered in selection of project. (05 Marks)
b. Explain the project cycle every project goes through. (05 Marks)
c. Discuss the steps involved in PERT. Also give the advantages. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

1,a

(1) **Planning:** Planning is the primary function of management. It is looking ahead and preparing for the future. It determines in advance what should be done. It is conscious determination of future course of action. This involves determining why to take action? What action? How to take action? When to take action? Planning involves

determination of specific objectives, programs, setting policies, strategies, rules and procedures and preparing budgets. Planning is a function which is performed by managers at all levels – top, middle and supervisory. Plans made by top management for the organization as a whole may cover periods as long as five to ten years, whereas plans made by low level managers cover much shorter periods. This “Planning” is discussed in detailed in Chapter-2.

(2) **Organizing:** Organizing is the distribution of work in group-wise or section-wise for effective performance. Once the managers have established objectives and developed plans to achieve them, they must design and develop a human organization that will be able to carry out those plans successfully. Organizing involves dividing work into convenient tasks or duties, grouping of such duties in the form of positions, grouping of various positions into departments and sections, assigning duties to individual positions and delegating authority to each position so that the work is carried out as planned.

According to Koontz O’Donnell, “**Organization consists of conscious coordination of people towards a desired goal**”. One has to note that different objectives require different kinds of organization to achieve them. For example, an organization for scientific research will have to be very different from one manufacturing automobiles.

(3) **Staffing:** Staffing involves managing various positions of the organizational structure. It involves selecting and placing the right person at the right position. Staffing includes identifying the gap between manpower required and available, identifying the sources from where people will be selected, selecting people, training them, fixing the financial compensation and appraising them periodically. The success of the organization depends upon the successful performance of staffing function.

(4) **Directing:** Planning, organizing and staffing functions are concerned with the preliminary work for the achievement of organizational objectives. The actual performance of the task starts with the function of direction. This function can be called by various names namely “leading”, “directing”, “motivating”, “activating” and so on. Directing involves these sub functions:

(a) **Communicating:** It is the process of passing information from one person to another.

(b) **Leading:** It is a process by which a manager guides and influences the work of his subordinates.

(c) **Motivating:** It is arousing desire in the minds of workers to give their best to the enterprise.

(5) **Controlling:** Planning, organizing, staffing and directing are required to realize organizational objectives. To ensure that the achieved objectives conform to the pre-planned objectives control function is necessary. Control is the process of checking to determine whether or not proper progress is being made towards the objectives and goals and acting if necessary to correct any deviations. Control involves three elements:

- (a) Establishing standards of performance.
- (b) Measuring current performance and comparing it against the established standard.
- (c) Taking action to correct any performance that does not meet those standards.

(6) **Innovation:** Innovation means creating new ideas which may be either results in the development of new products or finding new uses for the old ones. A manager who invents new products is an innovator. A salesman who persuades Eskimos to purchase refrigerator is an innovator. One has to note that innovation is not a separate function but a part of planning.

(7) **Representation:** A manager has to spend a part of his time in representing his organization before various groups which have some stake in the organization. A manager has to be act as representative of a company. He has dealings with customers, suppliers, government officials, banks, trade unions and the like. It is the duty of every manager to have good relationship with others.

1b.

The Roles

Mintzberg published his Ten Management Roles in his book, "Mintzberg on Management: Inside our Strange World of Organizations," in 1990.

Interpersonal Category

The managerial roles in this category involve providing information and ideas.

1. Figurehead – As a manager, you have social, ceremonial and legal responsibilities. You're expected to be a source of inspiration. People look up to you as a person with authority, and as a figurehead.
2. Leader – This is where you provide leadership for your team, your department or perhaps your entire organization; and it's where you manage the performance and responsibilities of everyone in the group.
3. Liaison – Managers must communicate with internal and external contacts. You need to be able to network effectively on behalf of your organization. Informational Category

The managerial roles in this category involve processing information.

4. Monitor – In this role, you regularly seek out information related to your organization and industry, looking for relevant changes in the environment. You also monitor your team, in terms of both their productivity, and their well-being.
5. Disseminator – This is where you communicate potentially useful information to your colleagues and your team.
6. Spokesperson – Managers represent and speak for their organization. In this role, you're responsible for transmitting information about your organization and its goals to the people outside it.

Decisional Category

The managerial roles in this category involve using information.

7. Entrepreneur – As a manager, you create and control change within the organization. This means solving problems, generating new ideas, and implementing them.

8. Disturbance Handler – When an organization or team hits an unexpected roadblock, it's the manager who must take charge. You also need to help mediate disputes within it.

9. Resource Allocator – You'll also need to determine where organizational resources are best applied. This involves allocating funding, as well as assigning staff and other organizational resources.

Negotiator – You may be needed to take part in, and direct, important negotiations within your team, department, or organization.

2a.

Types of Decision Making

1. Tactical and Strategic Decisions

Tactical decisions are those which a manager makes over and over again adhering to certain established rules, policies and procedures. They are of repetitive nature and related to general functioning. Authority for taking tactical decisions is usually delegated to lower levels in the organization.

Strategic decisions on the other hand are relatively more difficult. They influence the future of the business and involve the entire organization. Decisions pertaining to objective of the business, capital expenditure, plant layout, production etc., are examples of strategic decisions.

2. Programmed and Non-programmed Decisions

Prof. Herbert Simon (June 15, 1916 - February 9, 2001), an American economist and psychologist, has used computer terminology in classifying business decisions. These decisions are of a routine and repetitive nature. The programmed decisions are basically of a routine type for which systematic procedures have been devised so that the problem may not be treated as a unique case each time it crops up.

The non-programmed decisions are complex and deserve a specific treatment. In the above example, if all the professors in a department stop their teaching work the problem cannot be solved by set procedural rules. It becomes a problem which requires a thorough study of the causes of such a situation and after analysing all factors a solution can be found through problem solving process.

3. Basic and Routine Decisions

Prof. Katona has classified decisions as basic and routine. Basic decision are those which require a good deal of deliberation and are of crucial importance. These decisions require the formulation of new norms through deliberate thought provoking process. Examples of basic decisions are plant location, product diversification, selecting channels of distribution etc.

Routine decisions are of repetitive nature and hence, require relatively little consideration. It may be seen that basic decisions generally relate to strategic aspects, while routine decisions are related to tactical aspects of a organization.

4. Organizational and Personal Decisions

Organizational decisions are those which an executive takes in his official capacity and which can be delegated to others.

On the other hand, personal decisions are those which an executive takes in his individual capacity but not as a member of organization.

5. Off-the-Cuff and Planned Decisions

Off-the-cuff decisions involve "shooting from the hip". These decisions can be taken easily and may be directed towards the purposes of the enterprise. On the other hand, planned decisions are linked to the objectives of organization. They are based on facts and involve the scientific process in problem solving.

6. Policy and Operating Decisions

Policy decisions are those which are taken by top management and which are of a fundamental character affecting the entire business. Operating decisions are those which are taken by lower management for the purpose of executing policy decisions. Operating decisions relate mostly to the decision maker's own work and behavior while policy decisions influence work or behavior pattern of subordinates.

7. Policy, Administrative and Executive Decisions

Ernest Dale (born in Hamburg, Germany and died at the age of 79) has classified decisions in business organization as under.

- (a) Policy decisions,
- (b) Administrative decisions and
- (c) Executive decisions.

2b.

Step 1. Perception of Opportunities: Perception of opportunities is not strictly a part of the planning process. But this awareness of opportunities in the external environment as well as within the organization is the real starting point for planning. It is important to take a preliminary look at possible future opportunities and see them clearly and completely.

Step 2. Establishing Objectives: This is the second step in the planning process. The major organizational and unit objectives are set in this stage. This is to be done for the long term as well as for the short range. Objective specify the expected results and indicate the end points of what is to be done, where the primary emphasis is to be placed and what is to be accomplished by the various types of plans.

Step 3. Planning Premises: After determination of organizational objectives, the next step is establishing planning premises that is the conditions under which planning activities will be undertaken. Planning premises are planning assumptions the expected environmental and internal conditions.

Thus planning premises are external and internal. External premises include total factors in task environment like political, social, technological, competitors, plans and actions,

government policies. Internal factors include organization's policies, resources of various types, and the ability of the organization to withstand the environmental pressure. The plans are formulated in the light of both external and internal factors.

Step 4. Identification of Alternatives: The fourth step in planning is to identify the alternatives. Various alternatives can be identified based on the organizational objectives and planning premises. The concept of various alternatives suggests that a particular objective can be achieved through various actions.

Step 5. Evaluation of Alternatives: The various alternative course of action should be analyzed in the light of premises and goals. There are various techniques available to evaluate alternatives. The evaluation is to be done in the light of various factors. Example, cash inflow and outflow, risks, limited resources, expected pay back etc., the alternatives should give us the best chance of meeting our goals at the lowest cost and highest profit.

Step 6. Choice of Alternative Plans: This is the real point of decision-making. An analysis and evaluation of alternative courses will disclose that two or more advisable and beneficial. The fit one is selected.

Step 7. Formulation of Supporting Plan: After formulating the basic plan, various plan is derived so as to support the main plan. In an organization there can be various derivative plans like planning for buying equipment, buying raw materials, recruiting and training personal, developing new product etc. These derivative plans are formulated out of the basic or main plan and almost invariably required to support the basic plan.

Step 8. Establishing Sequence of Activities: After formulating basic and derivative plans, the sequence of activities is determined so those plans are put into action. After decisions are made and plans are set, budgets for various periods and divisions can be prepared to give plans more concrete meaning for implementation.

3a,

The principles of organization are discussed below:

(1) **Objectives:** The objectives of the enterprise influence the organization structure. Every part of the organization and organization as a whole should be geared to the basic objective determined by the enterprise.

(2) **Specialization:** Effective organization must promote specialization. The activities of the enterprise should be divided according to functions and assigned to persons according to their specialization.

(3) **Span of control:** A manager can directly supervise only a limited number of executives. Hence, it is necessary to have a proper number of subordinates answerable to a manager. A maximum of six may be prescribed for this purpose.

(4) **Exception:** This principle requires that organization structure should be so designed that managers are required to go through the exceptional matters only. All the routine decisions should be taken by subordinates, where as problems involving unusual matters and policy decision should be referred to higher levels.

(5) Scalar principle: This is also known as chain of command. There must be clear lines of authority running from the top to the bottom. Authority is the right to decide, direct and coordinate. Every subordinate must know who his superior is and to whom policy matters beyond his own authority must be referred for decision.

(6) Unity of command: Each subordinate should have only one supervisor whose command he has to obey. Dual subordination must be avoided, for it causes uneasiness, disorder, and indiscipline and undermine of authority.

(7) Delegation: Proper authority should be delegated at the lower levels of the organization also. The authority delegated must be equal to responsibility i.e., the manager should have enough authority to accomplish the task assigned to him.

(8) Responsibility: A superior should be held responsible for the acts of his subordinates. No superior should be allowed to avoid responsibility by delegating authority to his subordinates.

(9) Authority: The authority is the tool by which a manager is able to accomplish the desired objective. Hence, the authority of each manager must be clearly defined. The authority and responsibility must be co-extensive in the organization.

(10) Efficiency: The organization should be able to attain the mission and objectives at the minimum cost.

(11) Simplicity: The organization structure should be as simple as possible with minimum number of levels. A large number of levels of organization means difficulty of effective communication and coordination.

(12) Flexibility: The organization should be flexible, should be adaptable to changing circumstances. It should permit expansion and replacement without dislocation and disruption of the basic design. A sound organization must avoid complicated procedures, red-tape and excessive complication of control so that it may adapt itself easily and economically to business and technical changes.

(13) Balance: There should be reasonable balance in the size of various departments, between centralization and decentralization. There must be balance in the formal structure as regards to factors having conflicting claims.

(14) Unity of direction: There must be one objective and one plan for a group of activities having the same objective. Unity of direction facilitates unification and coordination of activities at various levels.

(15) Personal abilities: As organization is a formal group of people there is need for proper selection, placement and training. Organization structure must ensure optimum use of human resources.

3b.

The staffing function has assumed greater significance these days because of various factors. Staffing is also a pervasive function. Through separate department exist for this yet every manager is engaged in performing the staffing function, when they participate in selection, training and evaluating their subordinates. The various reasons which have increased the significance of staffing functions are discussed below:

(1) Increasing size of organization: Advancement in science and technology has given rise to large scale companies employing thousands of employees. The performance of the company depends on the quality and character of the people. This has increased the importance of staffing.

(2) Advancement of technology: In order to make use of latest technology, the appointment of right type of persons is necessary.

(3) Long-range needs of manpower: In some industries, labour turn-over is high. The management is required to determine the manpower requirement well in advance. Management has also to develop the existing personal for future promotion. The role of staffing has also increased because of shortage of good managerial talents.

(4) Recognition of human relations: The behaviour of individuals has become very complicated and hence human aspect of organization has become very important. Employees are to be motivated by financial and non-financial incentives. Right kind of atmosphere should also be created to contribute to the achievement of organizational objectives. By performing the staffing function, management can show the significance it attaches to the man power working in the enterprise.

3c.

The staffing function performs the following sub functions:

(1) Manpower planning.

(2) Recruitment

(3) Selection of the best qualified from those who seeks job,

(4) Training and Development.

(5) Performance appraisal and compensation.

4a.

(1) Physiological needs: These are the basic needs for sustaining human life itself, such as food, water, shelter and sleep. Maslow took the position that until these needs are satisfied to the reasonable degree necessary to maintain life, other needs will not motivate people.

(2) Security or safety needs: People want to be free of physical danger and of the fear of losing job, property or shelter.

(3) Social needs: Since people are social being, they need to belong, to be accepted by others.

(4) Esteem needs: Once people begin to satisfy their need to belonging, they tend to want to be held in esteem both by themselves and by others. This kind of need produces such satisfaction as power, prestige and status.

(5) Self-actualization needs: It is desire to become what one is capable of becoming to maximize one's potential and to accomplish something.

4b.

Psychologist B.F. Skinner has developed another approach for motivation called as positive reinforcement or behaviour modification theory. According to his theory individuals can be motivated by proper design of their work environment and praise for their performance and that punishment for poor performance produces negative results. They analyze work situations to determine what causes workers to act the way they do and then they initiate changes to eliminate troublesome areas and obstructions to performance. Specific goals are then set with workers participation and assistance, prompt and regular feedback is made available, and performance improvements are rewarded with recognition and praise. Even when performance does not equal goals, way are found to help people and praise them for good things they do. It has also been found highly useful and motivating to give people full information on a company's problems, especially those in which they are involved.

4c.

There are three basic steps in a control process namely establishment of standards, measurement of performance and comparing the performance with the standards and taking corrective action.

1. Establishment of standards: The first step in control process is the setting up of standards of performance. A standard acts as a reference line or a basis of actual performance. Standards should be set precisely and in quantitative terms. Standards expressed in vague or general terms such as "Costs should be reduced" or "rejections should be reduced" are not specific as "cost should be reduced by 10 percent" or "rejections should be reduced to 0.5 percent". Standards are used as the criteria or benchmarks by which performance is measured in the control process. Since standards cannot be set for entire operations, each organization must first develop its own list of key result areas for the purpose of control. Different standards of performance are set up for various operations at the planning stage. As a matter of fact, planning is the basis of control.

Standards are to be flexible in order to adopt changing conditions. For example, a new salesman who seems to be an above average performer should have his sales standard adjusted accordingly. Every objective, goal, policy, procedure and budget becomes a standard against which actual performance might be measured. However, in practice different types of standards used are:

- (1) Physical standards such as units of production per hour.
- (2) Cost standards, such as direct and indirect cost per unit.
- (3) Revenue standards such as sales per customer.
- (4) Capital standards such as rate of return of capital invested.
- (5) Intangible standards such as competency of managers and employees.

2. Measuring and comparing actual performance with standards: The second step in the control process is measuring the actual performance of individuals, group or units and comparing it with the standards. The quantitative measurement should be done in cases where standards have been set in numerical terms. This will make evaluation easy and simple. In all other cases, the performance should be measured in terms of qualitative factors as in the case of performance of industrial relations manager.

His performance should be measured in terms of attitude of workers, frequency of strikes and morale of workers. In general, measurement of performance can be done by personal observation as in the case of the subordinates being observed while they are engaged in work or by a study of various summaries of figures, reports, charts and statements.

Once the performance is measured, it should be compared with the standards to detect deviations. Some deviations are desirable such as the output above the standard. But some other variations are undesirable such as a variation in the delivery schedule agreed upon with the customer. The measurement and comparison are to be made at various stages in the total process and not at the end.

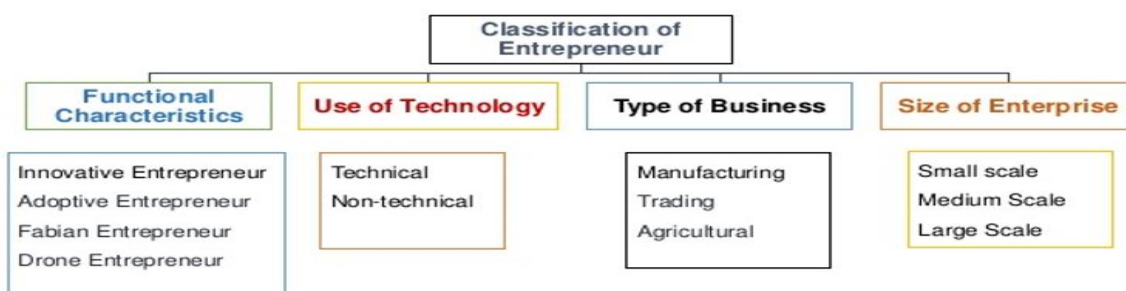
3. Taking corrective action: The final step in the control process is taking corrective action so that deviations may not occur again and the objectives of the organization are achieved. This will involve taking certain decisions by the management like replanning or redrawing of goals or standards, reassignment or classification of duties. It may also necessitate reforming the process of selection and training of workers. This control function may require change in all other managerial functions. If the standards are found to be defective, they will be set up again in the light of observations. Joseph Massie has pointed out that a manager may commit two types of mistakes at this stage.

The first is, he may take action when no action is needed. The second is he may fail to take action when some corrective action is needed. A good control system should provide some basis for helping the manager estimate the risks of making either of these types of errors. Of course, the final test of a control system is whether correct action is taken at the correct time.

5a.

1. Pivot of economic development
2. Basics of business
3. Organizer of associate is productive resources
4. Contribution of production of new products
5. Development of new production techniques
6. Help in removing regional disparities
7. Helpful in capital formation
8. Development of new market
9. Establishment of new industrial enterprises
10. Help in bringing changes in social framework
11. Contribution to standards of living
12. Generate employment opportunities

5b.



6a.

Entrepreneurship is a process of comprising several distinct stages. The first stage in the entrepreneurial process is some change in the real world. For example, a war may destroy country's manufacturing facilities but spare its trained work force that has happened in West Germany during Second World War. Such a change leads to changes in every aspect of life in the country. It creates needs for new goods and services. The distraction of Japan's industry during the Second World War allowed the country to rebuild its industry from scratch.

The second stage in the entrepreneurial development is the 'idea'. For example, microprocessor, the brain of personal computer had been in the American market since the early 1970s. A company called 'Altair' had put out a computer that was so personal that one had to put it together oneself. But it was Apple Computer, which perceived that computer market was potentially very big.

One may become an entrepreneur in various ways. He may start a new enterprise. Alternatively he may acquire a franchise. Franchising is an entrepreneurial system whereby an individual runs a business based on the right to make a product or service granted by a manufacturer or other organization. Intrapreneuring is another strategy. It is the process of extending the firms domain of competence by exploiting new opportunities through new combinations of its existing resources.

6b.

A large number of entrepreneurs particularly in the small enterprises fail due to several problems and barriers. The greatest barrier to entrepreneurship is the failure of success. Karl. H. Vesper has identified the following entrepreneurship barriers:

1. Lack of a viable concept
2. Lack of market knowledge
3. Lack of technical skills
4. Lack of seed capital
5. Lack of business know how
6. Complacency—lack of motivation
7. Social stigma
8. Time presence and distractions
9. Legal constraints and regulations
10. Monopoly and protectionism
11. Inhibitions due to patents

7a.

Role of SSI

1. Generate employment

2. Self employment
3. Lesser capital requirement
4. Mobilization of capital
5. Mobilization of local resources
6. Mobilization of entrepreneurial skill
7. Equitable distribution of Income
8. Balanced regional development
9. Saving foreign exchange/Promote exports
10. Feeder to large scale industries
11. Social Advantage
12. Share in Industrial production
13. Development of entrepreneurs
14. It facilitates women growth

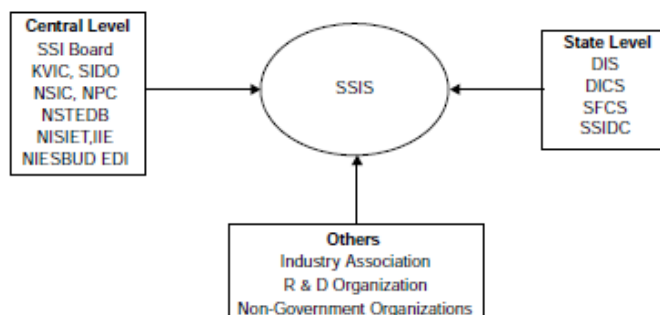
7b. Problems – SSI

1. Poor capacity utilization
2. Incompetent management
3. Inadequate finance
4. Raw material shortages
5. Lack of marketing support
6. Problems of working capital
7. Problems in exports
8. Lack of technology up gradation
9. Multiplicity of labour laws
10. Inability to meet environmental standards
11. Delayed payments
12. Poor industrial relations
13. Strain on government finances
14. Concentration of industrial units
15. Widespread sickness

7c. Impact of Globalization

The problems of SSI in liberalized environment have become multidimensional delay in implementation of project, inadequate availability of finance and credit, marketing problems, cheap and low quality products, technological obsolescence, lack of infrastructural facilities, deficient managerial and technical skills, to name some.

8a.



8b.

The challenges to the small-scale sector are due to the impact of agreements under WTO. The setting up of the WTO in 1995 has altered the framework of international trade towards non-distortive, market oriented policies. This is in keeping with the policy shift that occurred world wide in favour of the free market forces and tilt away from state regulation/intervention in economic activity. This is likely to lead to an expansion in the volume of international trade and changes in the pattern of commodity flows.

The main outcome of WTO stipulated requirements will be brought about through reduction in export subsidies, greater market access, removal of non-tariff barriers and reduction in tariffs.

There will also be tighter patent laws through regulation of intellectual property rights under Trade-Related Intellectual Property Rights (TRIPS) Agreements, which laid down what is to be patented, for what duration and on what terms. Increased market access to imports will mean opening up the domestic market to large flows of imports. The removal of quantitative restrictions on imports of these items will soon be freed from all restrictions as announced in the recent import-export policy. Increased market access will also mean that our industries can compete for export markets in both developed and developing countries. But the expected surge in our exports can come about only if SSI sector is restructured to meet the demands of global competitiveness, which is the key to the future of small industries in present contest.

SSIs have to face threats and also avail opportunities owing to the WTO and its agreements. The main opportunities of the WTO are classified into three. Firstly, national treatment of exportable items across the countries all over the world, with better market access through the internet. Second, enlightened entrepreneurs have greater opportunities to benefit from their comparative advantages due to lowering of tariffs and dismantling of other restrictions. Finally, industries that are in constant touch with government, which in turn negotiates in their best interests in the on-going dialogue with the WTO, are going to benefit. India has real chance of becoming superpower in the service sector, particularly IT. It has already captured about 25 percent of world exports.

8c.

The main reasons for the sickness can be categorized as:

1. External or Exogenous causes

2. Internal or Endogenous causes

1. Exogenous Causes:

There may be several exogenous factors causing a unit sick. It may vary from time to time for industry to industry and/or even one time to other or the same industry.

The important external reasons may be:

(i) Shortage of financial resources

(ii) Labour unrest/strike

(iii) Lack of demands of the product

- (iv) Change in industrial policy
- (v) Poor inventory maintenance
- (vi) Untimely supply of/purchase of raw materials
- (vii) Natural calamities like flood, earthquake, drought etc.
- (viii) Recessionary trends hovering the industry.

9a.

A good project report should contain the following.

- (1) General information: Information on product profile and product details.
- (2) Promoter: His/her educational qualification, work experience, project related experience.
- (3) Location: exact location of the project, lease or freehold, location advantages.
- (4) Land and building: land area, construction area, type of construction, cost of construction, detailed plan and estimate along with plant layout.
- (5) Plant and machinery: Details of machinery required, capacity, suppliers, cost, various alternatives available, cost of miscellaneous assets.
- (6) Production process: Description of production process, process chart, technical know how, technology alternatives available, production programme.
- (7) Utilities: Water, power, steam, compressed air requirements, cost estimates sources of utilities.
- (8) Transport and communication: Mode, possibility of getting costs.
- (9) Raw material: List of raw material required by quality and quantity, sources of procurement, cost of raw material, tie-up arrangements, if any for procurement of raw material, alternative raw material, if any.
- (10) Man power: Man power requirement by skilled and semi-skilled, sources of manpower supply, cost of procurement, requirement for training and its cost.
- (11) Products: Product mix, estimated sales distribution channels, competitions and their capacities, product standard, input-output ratio, product substitute.
- (12) Market: End-users of product, distribution of market as local, national, international, trade practices, sales promotion devices, proposed market research.
- (13) Requirement of working capital: Working capital required, sources of working capital, need for collateral security, nature and extent of credit facilities offered and available.
- (14) Requirement of funds: Break-up project cost in terms of costs of land, building machinery, miscellaneous assets, preliminary expenses, contingencies and margin money for working capital, arrangements for meeting the cost of setting up of the project.
- (15) Cost of production and profitability of first ten years.

(16) Break-even analysis.

(17) Schedule of implementation.

9.b

Project feasibility analysis is carried out to ensure viability of project. The important project feasibility study is

1. Market feasibility
2. Technical feasibility
3. Financial feasibility
4. Economic feasibility
5. Ecological feasibility

10a

Project selection starts once the entrepreneur has generated few ideas of project. After having some ideas, these project ideas are analyzed in the light of existing economic conditions, market conditions, and the government policy and so on. For this purpose a tool is generated used what is called SWOT analysis. The intending entrepreneur analyses his strengths and weaknesses as well as opportunities/competitive advantages and threats/challenges offered by each of the project ideas. In addition the entrepreneur needs to analyze other related aspects also like raw material, potential market, labor, capital, location and forms of ownerships etc. Each of these aspects has to be evaluated independently and in relation to each of these aspects. This forms a continuous and back and forth process. On the basis of this analysis, the most suitable idea is finally selected to convert it into an enterprise. The process involved in selecting a project out of few projects is also termed as “Zeroing in Process”.

10b.



10c.

Use of PERT: The following steps are used in PERT:

- (1) The activities of the project are identified along with their interrelationships and graphically represented using networks.
- (2) The time required for completing each activity is estimated and noted on the network.
- (3) The minimum time required for completing the entire project is estimated.
- (4) The critical activities are identified for the efficient allocation of resources in order to complete the project earlier, if necessary.
- (5) Closer watch on critical and other activities so as to complete the project on time.