**MBA – IV Semester**

**Global Competitiveness and Strategic Alliances**

**Solution Set – 2013**

**Q.1 What are the macroeconomic variables of global competitiveness? Are they called as 12 pillars of competitiveness? Justify your answer by giving a brief explanation of these pillars.**

Ans: We define competitiveness as the set of institutions, policies, and factors that determine the level of productivity of a country.

The Global Competitiveness Report 2013-2014assesses the competitiveness landscape of 148 economies, providing insight into the drivers of their productivity and prosperity. The Report series remains the most comprehensive assessment of national competitiveness worldwide.

The level of productivity, in turn, sets the level of prosperity that can be reached by an economy. The productivity level also determines the rates of return obtained by investments in an economy, which in turn are the fundamental drivers of its growth rates. In other words, a more competitive economy is one that is likely to grow faster over time. The concept of competitiveness thus involves static and dynamic components. Although the productivity of a country determines its ability to sustain a high levelof income, it is also one of the central determinants of its returns on investment, which is one of the key factors explaining an economy’s growth potential.

Many determinants drive productivity and competitiveness. Understanding the factors behind this process has occupied the minds of economists for hundreds of years, engendering theories ranging from Adam Smith’s focus on specialization and the division of labor to neoclassical economists’ emphasis on investment in physical capital and infrastructure, and, more recently, to interest in other mechanisms such as education and training, technological progress, macroeconomic stability, good governance, firm sophistication, and market efficiency, among others. While all of these factors are likely to be important for competitiveness and growth, they are not mutually exclusive—two or more of them can be significant at the same time, and in fact that is what has been shown in the economic literature. This open-endedness is captured within the GCI by including a weighted average of many different components, each measuring a different aspect of competitiveness. These components are grouped into 12 pillars of competitiveness:

**First pillar: Institutions**

The institutional environment is determined by the legal and administrative framework within which individuals, firms, and governments interact to generate wealth. The importance of a sound and fair institutional environment has become all the more apparent during the recent

Economic and financial crisis and is especially crucial for further solidifying the fragile recovery, given the increasing role played by the state at the international level and for the economies of many countries. The quality of institutions has a strong bearing on competitiveness and growth. It influences investment decisions and the organization of production and plays a key role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies. For example, owners of land, corporate shares, or intellectual property are unwilling to invest in the improvement and upkeep of their property if their rights as owners are not protected. The role of institutions goes beyond the legal framework. Government attitudes toward markets and freedoms and the efficiency of its operations also very important: excessive bureaucracy and red tape, overregulation, corruption, dishonesty in dealing with public contracts, lack of transparency and trustworthiness, inability to provide appropriate services for the business sector, and political dependence of the judicial system impose significant economic costs to businesses and slow the process of economic development. In addition, the proper management of public finances is also critical for ensuring trust in the national business environment. Indicators capturing the quality of government management of public finances are therefore included here to complement the measures of macroeconomic stability captured in pillar 3 below. Although the economic literature has focused mainly on public institutions, private institutions are also an important element of the process of creating wealth. The global financial crisis, along with numerous corporate scandals, have highlighted the relevance of accounting and reporting standards and transparency for preventing fraud and mismanagement, ensuring good governance, and maintaining investor and consumer confidence. An economy is well served by businesses that are run honestly, where managers abide by strong ethical practices in their dealings with the government, other firms, and the public at large. Private-sector transparency is indispensable to business; it can be brought about through the use of standards as well as auditing and accounting practices that ensure access to information in a timely manner.

**Second pillar: Infrastructure**

Extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy, as it is an important factor in determining the location of economic activity and the kinds of activities or sectors that can develop within a country. Well-developed infrastructure reduces the effect of distance between regions, integrating the national market and connecting it at low cost to markets in other countries and regions. In addition, the quality and extensiveness of infrastructure networks significantly impact economic growth and Reduce income inequalities and poverty in a variety of ways.

A well-developed transport and communications infrastructure network is a prerequisite for the access of less-developed communities to core economic activities and services. Effective modes of transport—including quality roads, railroads, ports, and air transport—enable entrepreneurs to get their goods and services to market in a secure and timely manner and facilitate the movement of workers to the most suitable jobs. Economies also depend on electricity supplies that are free from interruptions and shortages so that businesses and factories can work unimpeded. Finally, a solid and extensive telecommunications network allows for a rapid and free flow of information, which increases overall economic efficiency by helping to ensure that businesses can communicate and decisions are made by economic actors taking into account all available relevant information. This is an area where the crisis may prove to have positive longer-term effects, given the central role of infrastructure development in many of the national stimulus packages in countries such as the United States and China.

**Third pillar: Macroeconomic environment**

The stability of the macroeconomic environment is important for business and, therefore, is significant for the overall competitiveness of a country. Although it is certainly true that macroeconomic stability alone increase the productivity of a nation, it is also recognized that macroeconomic disarray harms the economy. The government cannot provide services efficiently if it has to make high-interest payments on its past debts. Running fiscal deficits limits the government’s future ability to react to business cycles. Firms cannot operate efficiently when inflation rates are out of hand. In sum, the economy cannot grow in a sustainable manner unless the macro environment is stable. It is important to note that this pillar focuses only on macroeconomic environment stability, so it does not directly take into account the way in which public accounts are managed by the government. This qualitative dimension is captured in the institutions pillar described above.

**Fourth pillar: Health and primary education**

A healthy workforce is vital to a country’s competitiveness and productivity. Workers who are ill cannot function to their potential and will be less productive. Poor health leads to significant costs to business, as sick workers are often absent or operate at lower levels of efficiency. Investment in the provision of health services is thus critical for clear economic, as well as moral, considerations. In addition to health, this pillar takes into account the quantity and quality of the basic education received by the population, which is increasingly important in today’s economy. Basic education increases the efficiency of each individual worker. Moreover, often workers who have received little formal education can carry out only simple manual tasks and find it much more difficult to adapt to more advanced production processes and techniques, and therefore contribute less to devising or executing innovations. In other words, lack of basic education can become a constraint on business development, with firms finding it difficult to move up the value chain by producing more sophisticated or value intensive products.

**Fifth pillar: Higher education and training**

Quality higher education and training is crucial for economies that want to move up the value chain beyond simple production processes and products. In particular, today’s globalizing economy requires countries to nurture pools of well-educated workers who are able to perform complex tasks and adapt rapidly to their changing environment and the evolving needs of the production system. This pillar measures secondary and tertiary enrollment rates as well as the quality of education as evaluated by business leaders. The extent of staff training is also taken into consideration because of the importance of vocational and continuous on-the-job training—which is neglected in many economies—for ensuring a constant upgrading of workers’ skills.

**Sixth pillar: Goods market efficiency**

Countries with efficient goods markets are well positioned to produce the right mix of products and services given their particular supply-and-demand conditions, as well as to ensure that these goods can be most effectively traded in the economy. Healthy market competition, both domestic and foreign, is important in driving market efficiency, and thus business productivity, by ensuring that the most efficient firms, producing goods demanded by the market, are those that thrive. The best possible environment for the exchange of goods requires a minimum of government intervention that impedes business activity. For example, competitiveness is hindered by distortionary or burdensome taxes and by restrictive and discriminatory rules on foreign direct investment (FDI)—which limits foreign ownership—as well as on international trade. The recent economic crisis has highlighted the high degree of interdependence of economies worldwide and the degree to which growth depends on open markets. Protectionist measures are counterproductive as they reduce aggregate economic activity. Market efficiency also depends on demand conditions such as customer orientation and buyer sophistication. For cultural or historical reasons, customers may be more demanding in some countries than in others. This can create an important competitive advantage, as it forces companies to be more innovative and customer-oriented and thus imposes the discipline necessary for efficiency to be achieved in the market.

**Seventh pillar: Labor market efficiency**

The efficiency and flexibility of the labor market are critical for ensuring that workers are allocated to their most effective use in the economy and provided with incentives to give their best effort in their jobs. Labor markets must therefore have the flexibility to shift workers from one economic activity to another rapidly and at low cost, and to allow for wage fluctuations without much social disruption. The importance of the latter has been dramatically highlighted by events in Arab countries, where rigid labor markets were an important cause of high youth unemployment, sparking social unrest in Tunisia that then spread across the region. Youth unemployment is also high in a number of European countries, where important barriers to entry into the labor market remain in place. Efficient labor markets must also ensure clear strong incentives for employees and efforts to promote meritocracy at the workplace, and they must provide equity in the business environment between women and men. Taken together these factors have a positive effect on worker performance and the attractiveness of the country for talent, two aspects that are growing more important as talent shortages loom on the horizon.

**Eighth pillar: Financial market development**

The financial and economic crisis has highlighted the central role of a sound and well-functioning financial sector for economic activities. An efficient financial sector allocates the resources saved by a nation’s citizens, as well as those entering the economy from abroad, to their most productive uses. It channels resources to those entrepreneurial or investment projects with the highest expected rates of return rather than to the politically connected. A thorough and proper assessment of risk is therefore a key ingredient of a sound financial market. Business investment is also critical to productivity. Therefore economies require sophisticated financial markets that can make capital available for private-sector investment from such sources as loans from a sound banking sector, well-regulated securities exchanges, venture capital, and other financial products. In order to fulfill all those functions, the banking sector needs to be trustworthy and transparent, and—as has been made so clear recently—financial markets need appropriate regulation to protect investors and other actors in the economy at large.

**Ninth pillar: Technological readiness**

In today’s globalized world, technology is increasingly essential for firms to compete and prosper. The technological readiness pillar measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries, with specific emphasis on its capacity to fully leverage information and communication technologies (ICTs) in daily activities and production processes for increased efficiency and enabling innovation for competitiveness. ICTs have evolved into the “general purpose technology” of our time, given their critical spillovers to other economic sectors and their role as industry-wide enabling infrastructure. Therefore ICT access and usage are key enablers of countries’ overall technological readiness. Whether the technology used has or has not been developed within national borders is irrelevant for its ability to enhance productivity. The central point is that the firms operating in the country need to have access to advanced products and blueprints and the ability to absorb and use them. Among the main sources of foreign technology, FDI often plays a key role, especially for countries at a less advanced stage of technological development. It is important to note that, in this context, the level of technology available to firms in a country needs to be distinguished from the country’s ability to conduct blue-sky research and develop new technologies for innovation that expand the frontiers of knowledge. That is why we separate technological readiness from innovation, captured in the 12th pillar, described below.

**Tenth pillar: Market size**

The size of the market affects productivity since large markets allow firms to exploit economies of scale. Traditionally, the markets available to firms have been constrained by national borders. In the era of globalization, international markets have become a substitute for domestic markets, especially for small countries. Vast empirical evidence shows that trade openness is positively associated with growth. Even if some recent research casts doubts on the robustness of this relationship, there is a general sense that trade has a positive effect on growth, especially for countries with small domestic markets. Thus exports can be thought of as a substitute for domestic demand in determining the size of the market for the firms of a country. By including both domestic and foreign markets in our measure of market size, we give credit to export-driven economies and geographic areas (such as the European Union) that are divided into many countries but have a single common market.

**Eleventh pillar: Business sophistication**

There is no doubt that sophisticated business practices are conducive to higher efficiency in the production of goods and services. Business sophistication concerns two elements that are intricately linked: the quality of a country’s overall business networks and the quality of

Individual firms’ operations and strategies. These factors are particularly important for countries at an advanced stage of development when, to a large extent, the more basic sources of productivity improvements have been exhausted. The quality of a country’s business networks and supporting industries, as measured by the quantity and quality of local suppliers and the extent of their interaction, is important for a variety of reasons. When companies and suppliers from a particular sector are interconnected in geographically proximate groups, called clusters, efficiency is heightened, greater opportunities for innovation in processes and products are created, and barriers to entry for new firms are reduced. Individual firms’ advanced operations and strategies (branding, marketing, distribution, advanced production processes, and the production of unique and sophisticated products) spill over into the economy and lead to sophisticated and modern business processes across the country’s business sectors.

**Twelfth pillar: Innovation**

Innovation can emerge from new technological and non-technological knowledge. Non-technological innovations are closely related to the know-how, skills, and working conditions that are embedded in organizations and are therefore largely covered by the eleventh pillar of the GCI. The final pillar of competitiveness focuses on technological innovation. Although substantial gains can be obtained by improving institutions, building infrastructure, reducing macroeconomic instability, or improving human capital, all these factors eventually

run into diminishing returns. The same is true for the efficiency of the labor, financial, and goods markets. In the long run, standards of living can be largely enhanced by technological innovation. Innovation is particularly important for economies as they approach the frontiers of knowledge and the possibility of generating more value by only integrating and adapting exogenous technologies tends to disappear.

Although less-advanced countries can still improve their productivity by adopting existing technologies or making incremental improvements in other areas, for those that have reached the innovation stage of development this is no longer sufficient for increasing productivity. Firms in these countries must design and develop cutting-edge products and processes to maintain a competitive edge and move toward even higher value-added activities. This progression requires an environment that is conducive to innovative activity and supported by both the public and the private sectors. In particular, it means sufficient investment in research and development (R&D), especially by the private sector; the presence of high-quality scientific research institutions that can generate the basic knowledge needed to build the new technologies; extensive collaboration in research and technological developments between universities and industry; and the protection of intellectual property, in addition to high levels of competition and access to venture capital and financing that are analyzed in other pillars of the Index. In light of the recent sluggish recovery and rising fiscal pressures faced by advanced economies, it is important that public and private sectors resist pressures to cut back on the R&D spending that will be so critical for sustainable growth going into the future.

**Q.2 What are the various frameworks available for assessing competitiveness? Discuss these frameworks given by world economic forum and Michael Porter.**

Ans: The 10-P framework for globalization symbolizes the aspirations and needs of employees and organizations in the new competitive settings. It comes a long way from the initial impetus provided to the subject by Michael Porter in his book Competitive Strategy (1980), and goes beyond his purely industrial organization perspective. The 10-P framework explores a fine ‘fit’ between the soft and hard strategic choices. It seeks a self-motivated network of stakeholders who are able to self actualize a high sense of satisfaction, self-worth, liberty and freedom in business organizational settings.

True to the vision of a world-class organization, the central fulcrum in the framework is a people- orientation – both inside and outside the corporation. This approach presents a humane perspective to issues at hand and differentiates between a ‘satisfying’ approach and an ‘excellent’ approach. It realizes and reflects that modern economies and corporations thrive mainly on innovation in all respects of value-augmentation-creative thinking at the design stage, ensuring production at highest efficiency and minimum costs, and satisfying the customer in a most effective manner.

The rest of the 9-Ps are levered in a highly interactive mode with People and amongst them­selves. A change in any of the Ps affects performance of the other levers and therefore the final outcome for the organization. The 9-Ps is: Purpose, Perspective, Positioning, Plans (and policies), Partnerships, Products, Productivity, Politics, and Performance (and profits).

**1. People:**

Organization is people: An organization is created by the people; it exists for the people, and con­tinuously draws sanction from the people. From this humane perspective, the primary objective of an organization can only be to add value to the society by serving it with value-augmented products.

The people-focus implies that the primary purpose of an organization can never be to provide employment at the expense of customers or society in general – a drill routinely exercised in Third World countries, and especially in India by many public sector and government organizations during the height of regulated economic regimentation. Similarly, retrenchment of people (hire and fire) cannot be accepted as a non-holds-barred practice for maximizing organizational profits! Retrench­ment is a myopic and non-creative response to the problem of cutting costs and improving produc­tivity.

**2. Purpose:**

Organizational purpose as used in strategy-making sense is interchangeable with mission, vi­sion, core competence, strategic intent, and basic values. It is important not merely to produce and sell products, but to produce and sell quality products, without fail. Not only from the production side, but also from the distribution side, we must constantly review whether our customers are satis­fied with our products and whether customers are satisfied with our service. Organizational purpose must be explicitly stated. An organization must enjoy social sanc­tion by serving socially useful purpose. Purposeless organizations are liable to drift and become marginal in the course of time. A sense of purpose is important for other organizational reasons, including facilitating inter- personal pro­cesses and formalization of relationships (the other characteristic of an organization). Globalization connotes dynamic human will for achieving larger social and human purposes.

**3. Perspective:**

Strategic management begins with a statement of clear perspective. Top-management perspec­tive is not a bunch of hunches. Organizational perspective must be well-researched. In facing global competitive challenges, it is important that the firm possesses a global perspective, even though it might be competing and managing locally.

Failure to develop an in-depth perspective results in missed opportunities. Polemical debates arise from lack of appreciation of multiple perspectives. Some of the techniques for improving the perspective horizon and thereby quality of decisions is: scenario-building, process consultation, in-house training programmes, job rotation, and cross- functional teams.

**4. Positioning:**

An important dimension in achieving world-class competitiveness relates to the positioning of the firm. This dimension has high interface with organizational purpose, planning and perspective, resulting in definitional confusion. Positioning of the firm is distinct from positioning of products in marketing. The term has remained mostly confined to abstract strategic management literature de­spite its obvious criticality to practice. An important dimension in strategy is to understand ‘where am I’, ‘why am I here’, ‘where do I want to be’, and ‘how do I reach there’. In other words, the strategic manager has to ascertain the existing position and future positioning of the firm.

Positioning means the place in the industry which the firm would like to occupy in relation to its competitors from the perspective of the consumers. Does the firm compete on lowest-cost mass- production, high-technology basis? Does it differentiate itself from others on the basis of superior and value-augmented products, or on high-ethic practices, employee policies, etc. which are unique in the industry?

An important technique for ascertaining positioning choices is by mapping the strategic groups in the industry. In this technique, clusters of competitors are identified based on their key strategic choices with regard to broad but critical dimensions of the industry structure.

**5. Partnerships:**

The partnership approach suggests a sense of belief and trust in other person’s capabilities and skills. It opens the doors for people to look beyond the usual routine responses, and create an envi­ronment where people voluntarily come up with innovative solutions for seemingly intractable prob­lems. Partnership is a ‘perspective’ as well as a ‘position’. Partnership has softer (intangible) and harder (tangible) dimensions.

For world-class performance, thus, an interactive, mutually reinforcing, and politically strong rela­tionship between government, industry, and firms is necessary. To implement this strategy, a fresh perspective of treating each stakeholder as a partner has to be developed at all levels. The diverse groups are held together by shared values. The partnership approach precludes any superior-subordinate relationship. This is true at both the levels: employee-employee, and firm- firm. Government, industry, and firms are partners on one plane.

**6. Productivity:**

Global competitiveness is largely an expression of firm’s relative productive efficiency. A country’s prosperity is indicated by the amount of value-added goods that are produced/made avail­able for consumption. Labour productivity is generally the accepted measure of value- addition with the assumption that the same individual would have different capacities in different technological environments and organizational contexts. A key managerial decision that vitally affects the firm’s overall productivity pertains to capital intensity of the project in terms of investments in land, building and machinery. This decision also affects leverage position of firms.

**7. Product:**

A product is a package of information which the customer interprets in his mind while going through the process of consumption. Therefore, the concept of any product must start with the customer in mind, and end with his total satisfaction. In this definition all products are ultimately service converted into information. Beyond quality, products must offer customers a satisfaction level where they become the best salesmen for the company forever.

**8. Plans (and Policies):**

The thrust of the 10-P framework is to integrate people’s personal growth and development with organizational objectives through excellent all-round quality. The premise is that the tasks are executed with finesse by satisfied and motivated people. To ensure that people remain aligned with the common sense of purpose and do not drift, the organization must have clear, documented statements of objectives and broad plans. A firm’s plan’ must contain a clear mission statement on the way it proposes to serve the cus­tomer. The first task for the firms is to break open the rigidity of the work culture system which, over time has acquired characteristic air-tight compartmentalization of jobs. In pursuing globalization, functional distinctions evaporate. The firm has to acquire an integrated outlook in its business opera­tions. Strategic manufacturing advantages such as high quality products, costs, productivity, and technology absorption become important and enduring competitive resources. Development of these resources calls for long-term investments in highly skilled and motivated multi-functional personnel backed up by committed professionals.

**9. Politics:**

Organizational politics is a reality; it provides dynamism to individuals, groups and total organi­zation. The orthodox organizational behaviour school holds that politics is an attempt to bypass the official channels or to influence outcomes for personal gains (impliedly, at the cost of organizational efficiency). Hence, this school holds that, politics being a negative power-bearing agent should be discouraged. This cannot be true in a larger perspective. Political behaviour, in the positive sense of the word, is a highly democratic and peaceful form of conflict resolution process especially useful in high-uncertainty environments.

**10. Performance:**

Improving performance outcomes is the core of all strategic management theories. Achievement of goals and objectives is the basis of all strategic planning. It is important to realize that different stakeholders will possess different measures of performance.

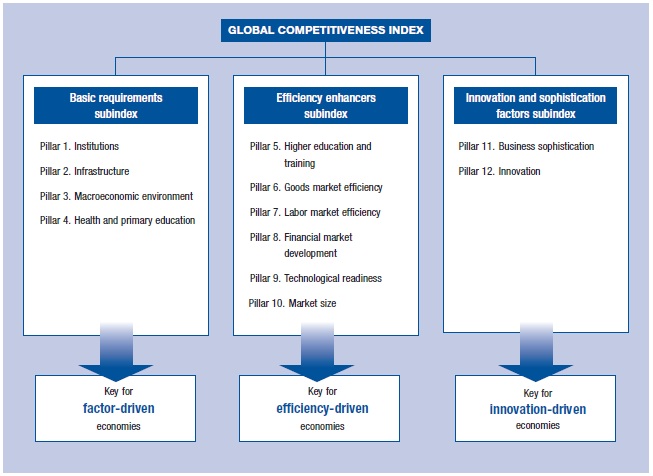
In one respect performance is the dependent variable whose outcome rests on the interface of all the rest of 9 P’s. But, performance in business settings is never an isolated outcome. It gets affected and in turn affects all other variables.

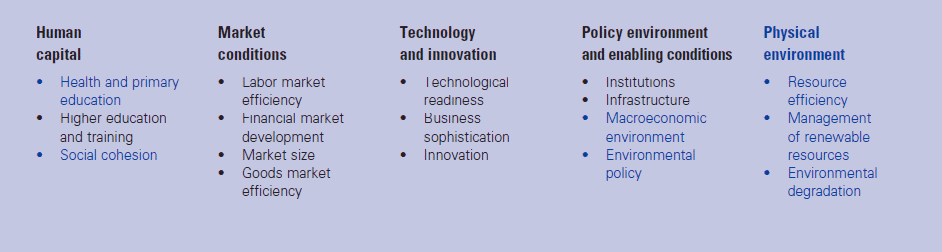
World class companies organize themselves and perform in a manner that accumulation of wealth is an automatic consequence of policies and plans. For world class performance, an organization has to be clear about its strategic objectives. Some important yardsticks with which performance can be objectively measured are:

* Market share
* Time taken to develop and introduce new products
* Technological competitiveness
* Employee motivation and skills
* Throughput value addition

All the ten Ps are not only dynamic, inter-related, but also overlapping. The task of the strategic manager is to strike a fit between the various soft and hard components appropriate to the organizational values and need of the times.

World economic forum has been studying the concept of competitiveness defined as the set of institutions, policies, and factors that determine the level of productivity of a country, in an effort to understand and measure the drivers of economic prosperity. The goal of this work is to provide diagnostic tools that indicate the areas of strength upon which economies can build as well as the challenges that must be overcome in order to increase national competitiveness. Over the years the forum has adapted and updated its approach as the research and thinking on the topic has evolved. Integrating the latest concepts into the forum’s work has ensured that it remains highly relevant in the ever-changing global economic context. The concept of sustainability, along with a sense of urgency about its achievement, has recently captured the attention of policymakers, business leaders, and the public at large. Sustainable development can be broadly: defined as development that satisfies the needs of the present without compromising the ability of future generations to meet their own needs. A commonly used convention stipulates that being sustainable requires the ability to meet society’s economic, social, and environmental needs. World economic forum has developed global competitiveness index and sustainable competitiveness index for assessing competitiveness of the country.





**Q.3 What policy framework has been laid down by government of India in making the country and its business enterprise competitive? Discuss few policy measures of GOI to develop competitiveness.**

Ans: Trade Policy Measures

The government has announced many trade policy measures to increase the competitiveness of Indian Business sector in the Annual Supplement to foreign trade policy released on 5 June 2012. Many measures were also taken by the government in Union Budget 2012-13 and the RBI in its monetary and credit policies during the course of the year to help internationalization of Indian businesses.

Policy for Promoting State wise Exports

The top five states in India’s exports in 2011-12 were Maharashtra, Gujarat, Tamil Nadu, Andhra Pradesh, and Karnataka, accounting for 63.4 percent of India’s exports.

The Assistance to States for Developing Export Infrastructure and Allied Activities (ASIDE) Scheme provides assistance to state governments/ union territory (UT) administrations for creating for creating appropriate infrastructure for development and growth of exports. The budget outlay for financial year 2012-13 under the ASIDE scheme is 655.5 crore of which 573.22 crore has been sanctioned/released till the end of January 2013. The outlay has two components: state and central. Statewise allocation under the state component of ASIDE shows that the top five states in terms of allocation in 2012-13 are Gujrat, Maharashtra, Tamil Nadu, Karnataka and Andhra Pradesh which are also the top five states in India’s exports. Among the northeastern states, those with significant allocation are Assam, Meghalaya and Tripura.

Special Economic Zones

Special Economic Zone Act and Rules were notified in February 2006. Formal approvals have been granted for setting up of 579 SEZs, of which 384 have been notified. Of the total employment provided to 9,45,990 persons to SEZs as a whole, that to 8,11,286 persons is incremental employment generated after February 2006 when the Act had come into force. This is apart from the million mandays of employment created by the developer for infrastructure activities. During 2010-11, physical exports from SEZs were worth Rs 3,15,867.85 crore. In the next year (2011-12), the figure rose to Rs 3,64,477.73 crore, registering 15.4 per cent growth. In the first half of 2012-13, it has been to the tune of Rs 2,39,626.78 crore approximately, registering a growth of 36 per cent over exports in the corresponding period of the previous year. The total investment in SEZs till September 30, 2012 was Rs 2,18,795.41 crore approximately, including Rs 2,14,759.90 crore in the newly notified zones. Hundred per cent Foreign Direct Investment (FDI) is allowed in SEZs through the automatic route. A total of 160 SEZs are exporting goods & services, of this 98 are IT/ITeS, 17 multi-products and 50 other sector-specific SEZs. The total number of units in these SEZs is 3,306.

Contingency Trade Policy and Non-Tariff Measures

Anti-dumping investigations initiated by all countries, which hit a high in 2001, declined almost steadily till 2007."They picked up once again in 2008 but started declining to reach a low in 2011. However, in 2012 they have again increased with 114 investigations (up to June) compared to 68 in 2011In 2011, India topped the list of countries initiating such investigations, but in 2012 (up to June) Brazil is at the top followed by Argentina and Canada. India, the US, and EU with seven investigations each are at fourth spot. Trade and investment measures have pointed towards a slowdown in trade restrictive measures; the persistence of the global crisis has added to political and economic pressures on governments to resort to contingency trade policies and non tariff measures. Moreover the new measures implemented over the past five months that can be considered as restricting or potentially restricting trade add to the restrictions adopted since the outbreak of the global crisis. The trade coverage of the restrictive measures put in place since October 2008, excluding those that have been terminated, is estimated to be around 3 percent of world merchandise trade and 4 per cent f trade of G-20 economies.

Some Important Trade Policy Measures

Budget Related

Imports of equipment for initial setting up or substantial expansion of fertilizer projects are fully exempted from basic customs duty of five per cent for three years up to March 31, 2015.

• Basic customs duty on equipment required for high speed trains safety and efficiency cut from 10 per cent to 7.5 per cent. The basic customs duty was also reduced on some water soluble fertilizers and liquid fertilizers, other than urea, from 7.5 per cent to 5 per cent and from 5 per cent to 2.5 per cent.

• Proposal to fully exempt from basic customs duty parts of aircraft and testing equipment imported for maintenance, repair and overhaul purposes.

• Reduction in basic customs duty on machinery and instruments for surveying and prospecting from 10 per cent or 7.5 per cent to 2.5 per cent. In addition, full exemption from basic customs duty is being provided to coal mining projects..

• Reduction in basic customs duty on plant and machinery imported for setting up or substantial expansion of iron ore pellet plants or iron ore beneficiation plants from 7.5 per cent to 2.5 per cent

Credit Related

RBI on 23rd November 2011 announced two major changes in the External Commercial Borrowings (ECB) guidelines.  
  
**1. Increase in the ceiling of all-in-costs**  
  
In the light of increased credit spreads and tighter liquidity in global financial markets, RBI has increased the all-in-cost ceilings for a 3yr – 5yr tenor ECB by 50 bp, to 6M LIBOR+350 bp. The ceiling for 5yr + tenor ECB remains unchanged at 6 M Libor + 500 bps.  
The increased ceiling is to come into effect immediately and will be applicable till 31st March 2012. Thereafter it is subject to review.  
  
**2. Parking of ECB Proceeds**  
  
RBI has further stated that the ECB raised abroad for the purpose of rupee expenditure have to be immediately converted into rupee and bought to the credit of AD category I bank in India. Also the rupee funds as per the previous guidelines cannot be invested in capital markets, real-estate and inter-corporate lending.  
  
However proceeds of ECB raised to meet foreign exchange expenditure of the project, can be retained overseas. There is no change in this regard and the ECB funds parked overseas, like before are permitted to park into liquid assets like such as CDs, T-bills and other monetary instruments with maturity less than a year and ratings not less than ‘AA-‘.  
  
The above steps have been taken by RBI to ensure availability of long-term funding to the corporate clients in the current times of tight credit and risk aversion. Also one of the motives of RBI is to ensure smooth inflow of FDI flows in to the country , which can also act as a support to stronger rupee.  
  
**3. Foreign Currency – INR Swaps**  
  
RBI by a separate measure, removed the ceiling of USD 100 mn on the net supply of foreign exchange resulting from Rupee-FC swaps. As a result, Indian corporates are freer to swap long term rupee loans in to USD notionally, in order to save interest costs. This however would be of limited significance, as the Indian Corporate swapping rupees, say , to USD is not allowed to hedge the currency and interest rate risks for repayment of the notional USD loan.

**Q.4 Discuss the current status of competitiveness of textile sector in India. What steps have undertaken at the country level and individual company level to make India’s textile sector competitive post MFA regime.**

Ans: The textiles industry has an overwhelming presence in the Indian economy. Apart from providing one of the basic necessities of life, the textiles industry also plays a pivotal role through its contribution to industrial output, employment generation and export earnings of the country. The Textiles sector is the second largest provider of employment after agriculture. The major sub-sectors that comprise the textiles sector include the organized Cotton/ Man-Made Fibre Textiles Mill Industry, the Man-made Fibre/ Filament Yarn Industry, the Wool and Woollen Textiles Industry, the Sericulture and Silk Textiles Industry, Handlooms, Handicrafts, the Jute and Jute Textiles Industry, and Textiles Exports.

The close linkage of the Industry to agriculture and the ancient culture, and traditions of the country make the Indian textiles sector unique in comparison with the textiles industry of other countries. This also provides the industry with the capacity to produce a variety of products suitable to the different market segments, both within and outside the country. Thus, the growth and all round development of this industry has a direct bearing on the improvement of the economy of the nation. With the growing awareness in the industry of its strengths and weakness and the need for exploiting the opportunities and averting threats, the government has initiated many policies/schemes measures.

*Current Status of the Industry*

The textile industry holds significant status in the India. Textile industry provides one of the most fundamental necessities of the people. It is an independent industry, from the basic requirement of raw materials to the final products, with huge value-addition at every stage of processing.   
  
Today textile sector accounts for nearly 14% of the total industrial output. Indian fabric is in demand with its ethnic, earthly colored and many textures. The textile sector accounts about 30% in the total export. This conveys that it holds potential if one is ready to innovate.   
  
The textile industry is the largest industry in terms of employment economy, expected to generate 12 million new jobs by 2010. It generates massive potential for employment in the sectors from agricultural to industrial. Employment opportunities are created when cotton is cultivated. It does not need any exclusive Government support even at present to go further.

Currently, because of the lifting up of the import restrictions of the multi-fibre arrangement (MFA) since 1st January, 2005 under the World Trade Organization (WTO) Agreement on Textiles and Clothing, the market has become competitive; on closer look however, it sounds an opportunity because better material will be possible with the traditional inputs so far available with the Indian market. At present, the textile industry is undergoing a substantial re-orientation towards other then clothing segments of textile sector, which is commonly called as technical textiles. It is moving vertically with an average growing rate of nearly two times of textiles for clothing applications and now account for more than half of the total textile output. The processes in making technical textiles require costly machinery and skilled workers.

*Market Size*

The Indian textile industry is set for strong growth, buoyed by both strong domestic consumption as well as export demand. Abundant availability of raw materials such as cotton, wool, silk and jute and skilled workforce has made India a sourcing hub.The most significant change in the Indian textile industry has been the advent of man-made fibres (MMF). India has successfully placed its innovative range of MMF textiles in almost all the countries across the globe. MMF production increased by 6 per cent during December 2013. Cotton yarn production increased by 6 per cent during December 2013 and by 10 per cent during April-December 2013. Blended and 100 per cent non-cotton yarn production increased by 5 per cent during December 2013 and increased by 8 per cent during the year April-December 2013.

Cloth production by mill sector increased by 4 per cent during December 2013 and by 6 per cent during April-December 2013. Cloth production by handloom, and hosiery increased by 3 per cent and 11 per cent respectively during December 2013. Production by handloom, and hosiery sectors increased by 4 per cent and 13 per cent during April-December 2013. The total cloth production grew by 2 per cent during April-December 2013.

The potential size of the Indian textile and apparel industry is expected to reach US$ 221 billion by 2021, according to Technopak's Textile and Apparel Compendium 2012.

***Initiatives taken by the country in the post MFA regime***

1. **Technology Upgradation Fund Scheme**

The Technology Upgradation Fund Scheme (TUFS) was launched on 01.04.1999 for 5 years. It was subsequently extended up to 31.3.2007. The Scheme has been restructured w.e.f. 28.4.2011 and approved upto 31.03.2012. The Technology Upgradation Fund Scheme (TUFS), which is the “flagship” Scheme of the Ministry of Textiles, is the scheme for modernisation and technology upgradation in the textile sector. This Scheme aims at making available funds to the domestic textile industry for technology upgradation of existing units as well as to set up new units with state-of-the-art technology so that its viability and competitiveness in the domestic as well as international markets may enhance. It aims at providing capital for modernization of Indian textile industry at international interest rate. Investments in common infrastructure or facilities by an industry association, trust or co-operative society and other investments specified are also eligible for funding under the scheme.

1. **Mega Cluster**

The schemes for mega cluster support weavers/artisans, both in and outside the cooperative fold, including those in Self Help Groups (SHGs), Non- Governmental Organisations (NGOs) etc. The schemes provide for development of all the facets of selected clusters like raw material support, design inputs, up-gradation of technology, infrastructure development, marketing support, welfare of weavers etc. The schemes also raise living standards of the weavers/artisans by improving the infrastructure facilities, with better storage facilities, technology up-gradation in pre-loom/on-loom/postloom operations, weaving shed, skill up-gradation, design inputs, health facilities etc5.

The development of 6 Mega Clusters in Handloom, Handicrafts and Powerlooms were first announced by the Finance Minister in his Budget Speech 2008-09. Consequently, following three Central Sector Plan Schemes were approved by the Cabinet Committee on Economic Affairs (CCEA) in the meeting held on 20.11.2008:

* Comprehensive Powerloom Cluster Development Scheme
* Comprehensive Handloom Cluster Development Scheme
* Comprehensive Handicrafts Cluster Development Scheme

1. **Scheme for Integrated Textile Parks (SITP)**

Scheme for Integrated Textiles Parks was approved in the 10th Five Year Plan to provide the industry with world-class infrastructure facilities for setting up their textile units by merging the erstwhile ‘Apparel Parks for Exports Scheme (APES)’ and ‘Textile Centre Infrastructure Development Scheme (TCIDS)’.

1. **Setting up of Skilled Development Project for Textile Industry**

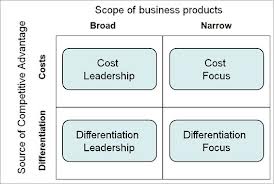
Integrated Skill Development Scheme (ISDS) caters to skilled manpower needs of Textile and related segments through skill development training programmes. The scheme envisages participation of training institutes associated with the Ministry and the private sector as implementing agencies. The scheme has two Components – Component-I for training Institutes within the Ministry and Component II for private sector. The Government meets 75% of the total cost of the project with balance 25% to be met by the implementing agencies with a provision of enhanced level of government assistance in certain circumstances. The average cost per trainee to be borne by the Government is limited to Rs. 7300 for Component-I and Rs. 7500 for Component-II. So far, 30 projects with an outlay of Rs. 594.84 crore targeting 5.87 lakh trainees have been sanctioned.

**Q.5 What strategic options are available for building competitiveness? How industrial clusters development leads to building competitiveness. Discuss with suitable examples.**

Ans:

Strategic Options Available for Building Competitiveness

A competitive advantage is an advantage gained over competitors by offering customers greater value, either through lower prices or by providing additional benefits and service that justify similar, or possibly higher, prices. For growers and producers involved in niche marketing, finding and nurturing a competitive advantage can mean increased profit and a venture that is sustainable and successful over the long term. This fact sheet looks at what defines competitive advantage and discusses strategies to consider when building a competitive advantage, as well as ways to assess the competitive advantage of a venture.

[](http://www.google.co.in/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&uact=8&docid=mdxtp_PtTxRJgM&tbnid=s_3zFvgdH2WmkM:&ved=0CAUQjRw&url=http://www.tutor2u.net/business/strategy/competitive_advantage.htm&ei=j6aBU62lO4ffOvHogLAL&psig=AFQjCNF9pA6LRB-_9x01CesTN5Nqrx_9uw&ust=1401092096920446)

The Cost Leadership Strategy

Porter's generic strategies are ways of gaining competitive advantage – in other words, developing the "edge" that gets you the sale and takes it away from your competitors. There are two main ways of achieving this within a Cost Leadership strategy:

* Increasing profits by reducing costs, while charging industry-average prices.
* Increasing market share through charging lower prices, while still making a reasonable profit on each sale because you've reduced costs.

The Differentiation Strategy

Differentiation involves making your products or services different from and more attractive those of your competitors. How you do this depends on the exact nature of your industry and of the products and services themselves, but will typically involve features, functionality, durability, support and also brand image that your customers value.

To make a success of a Differentiation strategy, organizations need:

* Good research, development and innovation.
* The ability to deliver high-quality products or services.
* Effective sales and marketing, so that the market understands the benefits offered by the differentiated offerings.

The Focus Strategy

* Companies that use Focus strategies concentrate on particular niche markets and, by understanding the dynamics of that market and the unique needs of customers within it, develop uniquely low cost or well-specified products for the market. Because they serve customers in their market uniquely well, they tend to build strong brand loyalty amongst their customers. This makes their particular market segment less attractive to competitors.
* As with broad market strategies, it is still essential to decide whether you will pursue Cost Leadership or Differentiation once you have selected a Focus strategy as your main approach: Focus is not normally enough on its own.
* But whether you use Cost Focus or Differentiation Focus, the key to making a success of a generic Focus strategy is to ensure that you are adding something extra as a result of serving only that market niche. It's simply not enough to focus on only one market segment because your organization is too small to serve a broader market (if you do, you risk competing against better-resourced broad market companies' offerings.)

In recent years, “cluster strategies” have become a popular economic development approach among state and local policymakers and economic development practitioners. An industry cluster is a group of firms, and related economic actors and institutions, that are located near one another and that draw productive advantage from their mutual proximity and connections. Cluster analysis can help diagnose a region’s economic strengths and challenges and identify realistic ways to shape the region’s economic future. Overall, the review’s most important findings for policymakers and practitioners are:

1. Clusters are the key organizational unit for understanding and improving the performance of regional economies. The foundation of a regional economy is a group of clusters, not a collection of unrelated firms. Firms cluster together within a region because each firm benefits from being located near other similar or related firms. The firms in a cluster have common competitive strengths and needs.

2. Cluster thinking matters because it orients economic development policy and practice toward groups of firms and away from individual firms. It is more important and fruitful to work with groups of firms on common problems (such as training or industrial modernization) than to work with individual firms. The cluster approach leads to little if any reliance on economic development subsidies and recruitment efforts aimed at individual firms; if these individual, firm-based policies are used at all, they should be focused on firms that fit within existing clusters.

3. Cluster thinking offers important lessons for economic development policy and practice. Cluster thinking teaches policymakers and practitioners to:

* Build on the unique strengths of their regions rather than try to be like other regions. Different regions have different sets of economic development opportunities. Not every place can or should become another Silicon Valley.
* Go beyond analysis and engage in dialogue with cluster members. Many policymakers and practitioners treat research on and analysis of clusters as the only elements of a cluster strategy. In fact, they are only a starting point for a cluster strategy. Identifying a cluster’s competitive strengths and needs requires an ongoing dialogue with the firms and other economic actors in the cluster. Although the public sector cannot be the exclusive driver of cluster policy, it can play a central role in convening cluster members and working with private-sector cluster organizations.
* Develop different strategies for different clusters. Clusters vary from industry to industry and from place to place and operate in many different dimensions. Different clusters have different needs. There is no one set of policies that will make all clusters successful. For example, a technology cluster may require help with research or capital, while a metals industry cluster may require assistance with job training or technology deployment.
* Foster an environment that helps new clusters emerge rather than creating a specific cluster from scratch. It is difficult for public policy to create new clusters deliberately. Instead, policymakers and practitioners should promote and maintain the economic conditions that enable new clusters to emerge. Such an environment might, for example, support knowledge creation, entrepreneurship, new firm formation, and the availability of capital. Cluster policy is not about “picking winners” or excluding industries.

Examples of Clusters

Motorsports

The UK has a leading position in the technology-driven motorsport industry. It has a large number of motorsport companies. Their precision engineering and advanced technology skills are increasingly exploited by the mainstream automotive industry. Most UK motorsport firms are based in an area known as ‘Motorsport Valley'. They supply the technology used in Formula One and dominate the production of cars and components to ‘Champ Cars' and other top US racing formulae. Motorsport Valley is an area based largely in southern and central England. Here most specialist motorsport firms have their research, design, engineering and production facilities. It acts as a global centre for the production of cars and parts. About 4,000 companies are involved in the UK motorsport manufacturing industry and its wide-ranging support activities. The engineering sector of the industry has an annual turnover of £2.9 billion, more than half of which is exported. Motorsport Development UK is the partnership responsible for implementing a five-year investment in British motorsport. Funding for the programme comes directly from BERR and four regional development agencies:

* Advantage West Midlands (AWM)
* East of England Development Agency (EEDA)
* East Midlands Development Agency (EMDA)
* South East England Development Agency (SEEDA).

The investment agenda is focused on five areas seen as key to a successful motorsport cluster in the UK. They are:

* business development and technology transfer
* a Motorsport Academy to improve skills and coordinate learning
* a Motorsport Learning Grid of educational activities
* development of energy efficient motorsport (EEMS) in the UK.

Food and drink

The food and drink sector in the northeast comprises more than 1,500 companies. Collectively these firms generate an annual turnover of £3.5 billion and employ 45,000 people. Food and drink processing is a leading employer in the region's manufacturing sector, employing about 20,000 people. It has attracted some of today's leading producers, including Nestle, United Biscuits, PepsiCo and Kerry Foods and contributes approximately £2 billion a year to the regional economy.

One NorthEast and regional partners are investing in this sector to develop growth and competitive advantage. Key actions include:

* developing and funding a food group for the region
* building supply chain capacity
* providing start-up grants for new firms in the sector
* addressing shortages of premises
* supporting export initiatives
* promoting and providing access to training and development.

**Q.6 What are strategic alliances? What are the different types of such alliances? What role these types of alliances play in improving competitiveness of Indian firms? Give examples.**

Ans: One of the fastest growing trends for business today is the increasing number of strategic alliances. According to Booz-Allen & Hamilton, strategic alliances are sweeping through nearly every industry and are becoming an essential driver of superior growth. Alliances range in scope from an informal business relationship based on a simple contract to a joint venture agreement in which for legal and tax purposes either a corporation or partnership is set up to manage the alliance.

For small businesses, strategic alliances are a way to work together with others towards a common goal while not losing their individuality. Alliances are a way of reaping the rewards of team effort - and the gains from forming strategic alliances appear to be substantial. Companies participating in alliances report that at much as 18 percent of their revenues comes from their alliances.

But it isn't just profit that is motivating this increase in alliances. Other factors include an increasing intensity of competition, a growing need to operate on a global scale, a fast changing marketplace, and industry convergence in many markets (for example, in the financial services industry, banks, investment firms, and insurance companies are overlapping more and more in the products they supply). Especially in a time when growing international marketing is becoming the norm, these partnerships can leverage your growth through alliances with international partners. Rather than take on the risk and expense that international expansion can demand, one can enter international markets by finding an appropriate alliance with a business operating in the marketplace you desire to enter.

A strategic alliance is essentially a partnership in which you combine efforts in projects ranging from getting a better price for supplies by buying in bulk together to building a product together with each of you providing part of its production. The goal of alliances is to minimize risk while maximizing your leverage and profit. Alliances are often confused with [mergers](http://www.smallbusinessnotes.com/small-business-resources/definition-of-merger.html), [acquisitions](http://www.smallbusinessnotes.com/small-business-resources/acquisition.html), and [outsourcing](http://www.smallbusinessnotes.com/small-business-resources/definition-of-outsourcing.html). While there are similarities in the circumstances in which a business might consider one these solutions, they are far from the same. Mergers and acquisitions are permanent, structural changes in how the company exists. Outsourcing is simply a way of purchasing a functional service for the company.

An alliance is simply a business-to-business collaboration. Another term that is frequently used in conjunction with alliances is establishing a business network. Alliances are formed for joint marketing, joint sales or distribution, joint production, design collaboration, technology licensing, and research and development. Relationships can be vertical between a vendor and a customer, horizontal between vendors, local, or global. Alliances often are established formally in a joint venture or partnership.

Businesses use strategic alliances to:

* achieve advantages of scale, scope and speed
* increase market penetration
* enhance competitiveness in domestic and/or global markets
* enhance product development
* develop new business opportunities through new products and services
* expand market development
* increase exports
* diversify
* create new businesses
* Reduce costs.

Strategic alliances are becoming a more and more common tool for expanding the reach of your company without committing yourself to expensive internal expansions beyond your core business.

There are four types of strategic alliances: joint venture, equity strategic alliance, non-equity strategic alliance, and global strategic alliances.

* **Joint venture** is a strategic alliance in which two or more firms create a legally independent company to share some of their resources and capabilities to develop a competitive advantage.
* **Equity strategic alliance** is an alliance in which two or more firms own different percentages of the company they have formed by combining some of their resources and capabilities to create a competitive advantage.
* **Non-equity strategic alliance** is an alliance in which two or more firms develop a contractual-relationship to share some of their unique resources and capabilities to create a competitive advantage.
* **Global Strategic Alliances** working partnerships between companies (often more than two) across national boundaries and increasingly across industries, sometimes formed between company and a foreign government, or among companies and governments.

*Advantages*:

A business strategic alliance is also a means to an end, not just an end in itself. Strategic alliances often take place between firms of different industries and of varied sizes, for vertical or horizontal links, consolidation of positions or any of the following:

1. Gain a means of distribution in International market- it may be beneficial for an exporter to ally with local partner, to understand the functioning and the local market network.
2. Overcome legal or regulatory barriers- in some countries it is mandatory to have local partner in order to conduct business. Thus, alliances offer suitable options.
3. Diversification- it may be advantageous to enter into an alliance as a business guide to minimize pitfalls in a new business territory.
4. Avoiding competition- an alliance may be entered into with a market leader or a major competitor to avoid competition.
5. Focus on new products and restructuring: an alliance in the form of a research and development alliance may focus at the development of new products. Apart from this, an alliance may also enable the firm to adapt to a more effective organizational structure.

**Q.7 How information technology can play an important role in developing competitiveness? Give examples where IT applications have helped in improving competitiveness of Indian businesses**.

Ans: Each organization is aware of the special effects, benefits and implication of Information technology (IT) in business performance and also its capacity in building sustainable competitive advantages. In business, IT is used through the value chains of activities which help the organization to optimize and control functions of operations for easy decision making. Also, the use of IT as a competitive weapon has become a popular instrument to influence on a particular organizational performance and the processes that will allow a smooth coordination of technology and corporate as well as business strategies.

The information revolution is sweeping through our economy. No company can escape its effects. Dramatic reductions in the cost of obtaining, processing, and transmitting information are changing the way we do business.

Most general managers know that the revolution is under way, and few dispute its importance. As more and more of their time and investment capital is absorbed in information technology and their effect, executives have a growing awareness that the technology can no longer be the exclusive territory of EDP or IS departments. As they see their rivals use information for competitive advantage, these executives recognize the need to become directly involved in the management of the new technology

Today, information technology must be conceived of broadly to encompass the information that businesses create and use as well as a wide spectrum of increasingly convergent and linked technologies that process the information. In addition to computers, then, data recognition equipment, communications technologies, factory automation, and other hardware and services are involved.

The information revolution is affecting competition in three vital ways:

* It changes industry structure and, in so doing, alters the rules of competition.
* It creates competitive advantage by giving companies new ways to outperform their rivals.
* It spawns whole new businesses, often from within a company’s existing operations.

Information technology is changing the way companies operate. It is affecting the entire process by which companies create their products. Furthermore, it is reshaping the product itself: the entire package of physical goods, services, and information companies provide to create value for their buyers.

An important concept that highlights the role of information technology in competition is the “value chain. “This concept divides a company’s activities into the technologically and economically distinct activities it performs to do business. We call these “value activities.” The value a company creates is measured by the amount that buyers are willing to pay for a product or service. A business is profitable if the value it creates exceeds the cost of performing the value activities. To gain competitive advantage over its rivals, a company must either perform these activities at a lower cost or perform them in a way that leads to differentiation and a premium price (more value).

*Technology Advances* have expanded production potential, product range variety, and increased outward expansion opportunities. It helped lower the cost and risk levels thus reducing the manufacturing capital requirements. Scheduling flexible production systems provides smaller production runs which uses just in time inventory which takes care not to carry excess inventory. Manufacturers can now have expanded range and variety of product of improved quality. Manufacturing industries in the developed countries are shifting from mass production of standardized goods to production of specialized goods, narrowly skilled workers to more versatile labourers, unvarying high-volume technology to flexible intelligent machinery. Survival in a dynamic environment entails the capacity to learn. The pace at which organizations learn may in the future become the only source of a *sustainable competitive* *advantage.* The rapid pace of development in Information Technology has created new business opportunities especially to *Small Units.*

Q.8

**a.) Role of technology and innovation in building competitiveness**

Ans: Technology and innovation are essential ingredients in the industrialization and sustainable development of nations. The importance of these ingredients as crucial factors in the economic growth and competitiveness of countries has become all the more evident in the face of globalization, trade liberalization and the emergence of knowledge-based industries. Globalization has brought with it a more intense competitive environment and new requirements for sustained competitiveness. This new competitive environment has fuelled the growth of knowledge-intensive production by increasing scientific and technological interactions and the need for innovation. The active search for continuous improvements has created an urgent need to rely even more on scientific and technological innovation and to adjust policies and practices at both the enterprise and government levels.

Science, technology and innovation (STI) are key drivers of economic and social development. The experience of successful developing countries shows that STI policies that are well integrated into national development strategies and combined with institutional and organizational changes can help raise productivity, improve firm competitiveness, support faster growth and create jobs. Technology & Innovation Management Key to Growth in a Knowledge Based Economy

The current competitive imperative is the development of a science and innovation culture. This identifies that the real engines of competitiveness and economic success remain science, innovation, technology, education and entrepreneurship. An essential part of developing the science and technology base for sustained competitive advantage is to build the organizations capacity to manage innovation successfully. Technology & Innovation Management is at the intersection of strategy, technology and operations. It provides executives with the understanding of how technology works in the innovation process and enables them to make sound business decisions. Successful innovation is inherently multi-functional and matches a profound understanding of user needs and wants to a distinctive technical competence.

**b.) Porter’s approach to Nation’s Competitiveness**

The competitiveness of a nation is determined by the superior and sustainable advantages it has in the long run. These advantages are not like that of classical economics; these are superior skilled and trained man-power, superior organizational structures, and an entrepreneurial spirit in the people involving organizational capacity to innovate. Porter combines these national values in a framework of diamond consisting of four nation-specific factors.

