

8 Explain the role of technical progress in the growth process. (10)

Ans: Technical Progress and Economic Growth

Technical advancement and economic growth are truly related to each other. The level of technology is also an important determinant of economic growth. The rapid rate of growth can be achieved through high level of technology. Schumpeter observed that innovation or technological progress is the only determinant to economic growth.

The role of technical progress to economic growth has been summarized below:

(1) Intensive utilization of Resources: Technical progress helps intensive utilization of the available resources. It leads to diversification of resource utilization. Increased and diversified output contributes to the growth of national income and economic growth.

(2) Use of Potential Resources: Technical advancement facilitates the discovery and utilization of potential resources of the country. Thus, technological progress helps the growth of substitute resources for imports. As a result, domestic production is increased with domestic resources.

themselves. For example, in India, oil could be exploited due to technical progress.

③ Helpful for export promotion: Technical advancement is very much helpful for export promotion. It facilitates diversification of output in underdeveloped countries. New technology helps to increase the level of output and therefore the capacity to export.

④ Contribution to Import Substitutions: An underdeveloped country utilizes technological progress in the field of import substitution. As a result, lot of foreign exchange is saved for the import of essential raw materials and capital goods.

⑤ Growth of Infra-structure: Technological advancement helps the growth of infra-structure of the economy. They include the basic facilities like transport, communication, power and irrigation. They play pioneer role for the growth.

⑥ Increase in the efficiency of Human

Resources: Technical advancement helps to increase the efficiency of human resources. Labour is given training for the use of techniques of production. It improves their efficiency.

(7) Helpful Industrialisation: The growth of industrialisation depends upon the growth and application of new technology. Technological progress has been the chief determinant of industrial revolution in the European nations. In less developed countries, establishment of basic industries requires modern technology.

(8) Change in Social and Economic structures: It has been observed that technological progress has made remarkable change in the social and economic structure of underdeveloped countries. A new social order is established. More of efficient labour and capital are needed for the application of new technology. For its arrangement new economic institutions are established.

(9) Increase in capital formations: Technical progress leads to the growth output and



Productivity. As a result, per capita income is increased. It helps to generate capital formation and the rate of growth automatically increases.

(10) Availability of foreign capital: New technology is used in the new enterprises established with foreign collaboration. In this way, foreign capital is available with the countries which can be used for domestic technological advancement.

(11) Agricultural Development: With the advancement of technology, agriculture sector is also developed. New agricultural strategies help to tremendous increase in agricultural production. In India, green revolution is a good example of technological progress.

In fact, the technology can be regarded as primary source in economic development and the various technological changes contribute significantly in the development of the countries.