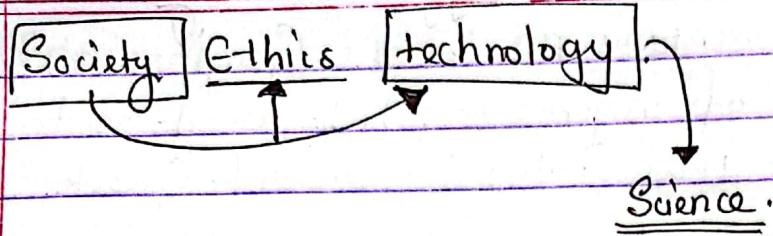


14. 11. 2022



16. 11. 2022

### ① What is technology?

→ Sociologist- Gerhard Lenski has defined technology as "information about how to use the material resources of the environment to satisfy human se needs and desires". (Nolan and Lenski, 1990).

According to Horton and Hunt, "Technology is the use of scientific discoveries to solve practical problems". In a word, technology is the comprised of the products and processes created by engineers to meet our needs and demands.

### ② Importance of science and technology :-

"The origin of Science, Technology and Society studies".  
Plato, in the fourth century BC in the *Gorgias*,  
recognised the value of engineers, but went on to  
protest about their low status in ancient Greek  
society.

Probably the first attempt to outline the ideal relationships between science, technology and society, though, was published in 1527 by the British lawyer and thinker Francis Bacon, in his book "The New Atlantis". Bacon told of an imaginary voyage to a small island in the South Seas, where a civilisation was based upon science and technology.

The [and Engineering] of our foundation is the knowledge

(\*) Views of scholars regarding science and technology

Question # 0101,

Ans:

(Enlightenment 1725)

Drama

(done 1/5)

21.11.22

\* How does politics play a crucial role in science and technology movement?

⇒ Politics has played a crucial part in the science and technology and Society movement. One of the

(PDF)  
slide

④ How war has played a crucial role in science and technology movement in society?

→ War has a major impact on the analysis of the role of science and technology in society. Of particular importance was the development of the atomic bomb.

The American Manhattan Project was set up in 1942, in conditions of complete secrecy, with the aim of making the first atomic bombs. Late in the war, the Japanese cities of Hiroshima and Nagasaki were destroyed by these bombs, forcing Japan to surrender. Many scientists who were engaged on the project later expressed regret at their involvement in the Manhattan Project. For the next fifty years, too, the rest of the world saw the production of huge numbers of nuclear weapons in the Cold War arms race between the United States and the Soviet Union, and lived with the prospect of total destruction.

Governments knew that, for their countries to progress, they had to support scientific research and technological development. As a result of this, governments began to plan for science and technology.

Perhaps the most dramatic of these developments took place in the United States. A distinguished scientist, Vannevar Bush, was asked to report on a suitable plan for science after World War II. Bush recommended,

the setting up of a National Research Foundation — which later became the National Science Foundation. He also wrote a report, *Science, The Endless Frontier* (Bush 1945), which advocated the setting up of a national policy concerned with science.

④ What do you understand by technology assessment?  
⇒ More recently, Science, Technology and Society has come to embrace another area of study, known as technology assessment, and concerned with the impact of large-scale technologies on society. As technology becomes bigger and more complicated — with nuclear power stations, jumbo jets and super tankers — it follows that the impacts are felt far and wide if something goes wrong, even if it is only a minor problem. The nuclear disasters at Chernobyl (1986) and Three Mile Island (1979) are good examples. It is now clear that the likely impact of technologies should be assessed before they are introduced. Researchers in this field look at emerging technologies and try to ensure that positive outcomes are exploited and negative effects avoided.

## ① Evolution of societies based on technology:



### Lenski's Sociocultural Evolution Approach:

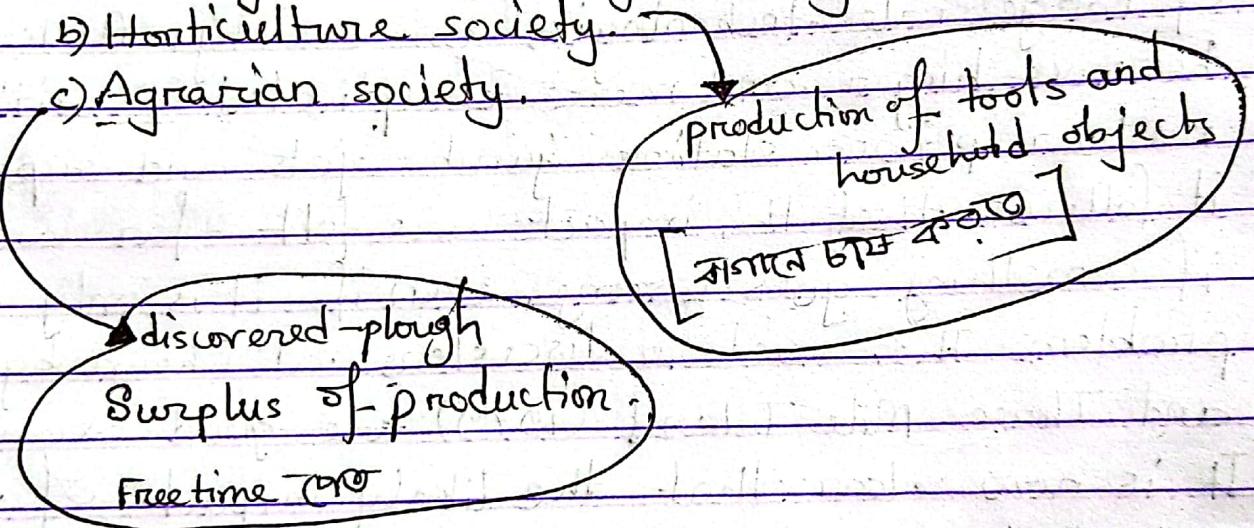
Sociologist According to lenski, as technology advances, lenski writes a community evolves from a preindustrial to an industrial and finally postindustrial society.

#### ① Preindustrial:

a) Hunting and gathering society.

b) Horticulture society.

c) Agrarian society.



② Industrial revolution took place in England during the period 1760 to 1830.

- ✓ An industrial society is a society that depends on mechanization to produce goods and services.
- ✓ Industrial society depends on new inventions that facilitate agricultural and industrial production and on new sources of energy such as steam

- ✓ Societies shifted from an agrarian oriented economy to an industrial base.
- ✓ No longer did an individual or a family typically make an entire production.
- ✓ Specialization of tasks and manufacturing of goods became increasingly common.
- ✓ Workers generally men but also women even children left their family homesteads to work in central locations such as factories.

③ Post-industrial : When Lenski first proposed the socio-cultural evolutionary approach in the 1960s, he paid relatively little attention to how maturing industrialized societies may change with emergence of even more advanced forms of technology. In the 1970s, sociologist Daniel Bell wrote about the technologically advanced post industrial society, whose economic system is engaged primarily in the processing and control of information.

## Post industrial Society:

- \* The occupational structure of industrial society shift from manufacturing to service economic.
- \* The technologically advanced post industrial society is economic system is engaged primarily in the processing and control of information
- \* The main out of a post industrial society is services rather than manufactured goods.
- \* Large number of people become involved in occupations devoted to the teaching, generation or discrimination of ideas.
- \* Jobs in fields such as advertising, public relation, human resources and computer information systems would be typical of a post modern society.
- \* There is general decline in organized working class group and a rise in interest groups concerned with national issues such as health, education and the environment.
- \* Organization and interest group engage in an open and competitive process of decision making.
- \* The growing class of white collar workers.
- \* Scientist, engineers and economists are involved in important political and economic decision but they have no free hand in decision making independent of the interests of the rich.
- \* Conflict between social classes will continue in post industrial society.

## \* Post modern Society

Post modern society is a ~~at~~ technologically sophisticated society that is preoccupied with consumer goods and media images (Brannigan 1992) , Such societies consume goods and information on a mass scale . Postmodern theorists take a global