DS113 TEST QUESTIONS AND ANSWERS

Question 1. With examples discuss the contribution of science, technology and innovation towards a sustainable development process.

Answer:

1. Health services

- Hospitals and clinics are the setting for major advancements of common modern science, where increasingly sophisticated techniques and technologies are used both for diagnosing and treating diseases.

- STI promote access to essential drugs.

- STI led to decrease in child mortality rates

- Areas like biotechnology such as red biotechnology, pharmaceuticals such as drug discovery and development, the development of medical devices and equipment such as ultrasound, CT scanners, x-ray machines, incubators, medical lasers, surgerical machines, and more have all made significant contributions to improving the health of people all around the world.

2. Education system

- Improved learning system through e-learning like LMS

- Use of internet, laptops, tablets, softwares and technical learning and teaching resources

- Increased in new learning and teaching facilities

- Researches

3. Military services

- Use of advanced weapons such as nuclear weapons

- Promotion of highly security systems in defending the nation from terrorism

*4. Politics

- General election registration system

- Political and democratic maturity through creation of platforms which allow criticism.

5. Agriculture

- Increased crop productivity and quality

- Improvement of irrigation system

- Genetic engineering on plants to produce different plant hybrids

6. Transport and communication systems

- Has made easy of transport and communication network, easy transfer of news and info through social media.

- Use of advanced faster means of transport that saves time

7. Economic sector

- Financial institutions like banks

- Good and fast improvement in trade and market sector through fast transactions

8. Industry

- Helped to promote industrialization

- Development of new machines

9. Proper utilization of natural resources

- Use of sources of renewable energy

- Increase national income leading to economic development

Conclusion: Challenges and measures

Question 2:

Technology transfer = the procress of transferring new technology from owner to a secondary user. Aim is to reduce the development gap btn developed and developing countries. Also boost up the economies of developing countries.

Challenges:

1. Political instability

- Emergence of civil wars

- Different ideologies

2. Corruption

- Existence of companies like EPA, RICHMOND

3. Unreliable power supply

- Electricity division

4. Poor investment policies

- Existence of tarrifs, double taxation

5. Market competition

6. Low capital

- Paying high salaries to experts

7. Rapid technological change

8. Lack of skilled man-power

9. To be dumping areas

- Losing focus in the core function

> Due to different Leaders' policies

- Asymmetrical distribution of products and services

> Unequal distribution of products and services relative to the population size

- Indequate number of experts or technicians on technology

- Lack of progress in terms of implementation

> Few people use the transferred technology

- Having too much goals and targets

- Poor market power

- Poor demand for specific technology transfer management

- Incomplete informal about technology transfer

Conclusion: Measures

Question 3:

Forward linkage = when agricultural products act as raw materials to other sectors

Backward linkage = reverse of forward linkage

Structural transformation = economy transition from low productivity and labor intensive activities to high productivity and skill intensive activities.

I support by the following points:

>> Linkage between agriculture and industry

>> Linkage between agriculture and education

>> Linkage between agriculture and tourism

>> Linkage between agriculture and financial sectors e.g. SACCOS, farmers' banks

>> Linkage between agriculture and trade activities

>> Linkage between agriculture and health sector

>> Linkage between agriculture and transport

>> Linkage between agriculture and mining sector

Conclusion: Challenges and measures

Question 4:

Food security = when all people at all times have physical and economic access to sufficient, safe and nutritious food that meet their needs and food preferences for an active and healthy life.

>> 4 Dimensions of food security

1. Food availability
2. Food access
3. Food utilization
4. Food stability

Conclusion: Measures

Question 5:

Inclusive and sustainable industrial development = the process which benefit the current generation without compromizing the future generation related to industrial sector including all sectors and people.

Challenges:

1. Poverty

2. Improper utilization of natural resources

3. Highly illiteracy rate

4. Poor government industrial policies and implementation

5. Low level of science and technology

6. Poor infrastruction

7. Price Fluctuation in world's market

- Unequal trade in multi-lateral trading system

- High taxation

- Unprotected market

- Unreliable power supply

- Lack of skilled labor

- Poor managerial capability

- Colonial legacy

- Political instability