

Day:4th August,2020

Day: Tuesday

Topic: Distribution of major crops of Pakistan

Book pg#72-74

Tutor link:<https://www.youtube.com/watch?v=9BYKBLuP4qU>

Major crops of Pakistan:

Major crops of Pakistan are divided into two main seasons: Rabi and Kharif. Rabi crops are sown in winter (October) and harvested in the summer (May), and these include wheat, barley, gram, oil seeds, etc.

In Pakistan food and cash crops are grown. Food crops like rice, wheat, maize, spike and pearl millet etc. cater the food needs of growing population of the country. Crops harvested for the purpose of making profit are called cash crops, like cotton, rice, sugarcane, tobacco etc. These crops are an important source of industrial raw material domestically. Different types of lentils and fruits are also harvested in our country. Pakistan is famous for its fruits. All provinces of Pakistan produce fruits. Important fruits are mango, citrus fruits, grapes, apple, plums, apricot, dates and peach, etc. Fruits in large quantity are also exported to other countries. Major crops of Pakistan are described below:

Wheat

Self-sufficiency in wheat can be achieved and sustained only if wheat yields are increased beyond past levels. This can be done by bringing more area under certified wheat seed. At present, only 10 percent of the wheat-growing area is being sown with certified wheat seed as against the minimally desired 20 percent. Further increase in yield can be realized through improved cultural practices, greater attention to tillage and harvesting, more balanced and timely use of fertilizer, and higher water-use efficiency.

Yield levels in the barani areas of Pakistan are exceptionally low, but yield can be increased if special attention is given to technology generation and dissemination in these areas. Particular attention should be given to the development of appropriate tillage and planting equipment. Research in the development of new wheat varieties will also have to place greater emphasis

Rice

Rice is the second most important economic crop in Pakistan. Pakistan appears to have a comparative advantage in producing the highly-valued, aromatic basmati rice. Basmati has been a major export of Pakistan, and generates substantial revenues for the government from export duties. The government has adopted a number of policy measures to promote larger production of basmati. The major rice-growing provinces, Punjab and Sindh, account for 54 and 36 percent, respectively, of the area planted. Basmati is grown in the Punjab.

Cotton

After wheat, cotton occupies the largest area of all the crops in Pakistan. Economically, it earns the largest export revenues. In addition to the lint, cottonseed for oil and meal accounts for 80 percent of the national oilseed production. In 1991-92, cotton was grown over about 2.836 million ha, with 61 percent of this area in Punjab. Since 1975-76, the area under cotton has increased by 53 percent. In Punjab, the yield increased from 249 kg/ha in 1975-76 to 849 kg/ha in 1991-92. The yield increase in Sindh was only from 363 kg/ha in 1975-76 to 435 kg/ha. Non-availability of good quality seed, a higher incidence of waterlogging, shift of good cotton areas to sugarcane, and absence of proper plant protection measures are the major reasons for this yield stagnation.

Maize

Maize occupied 847,500 ha during 1991-92, increasing from 620,000 in 1975-76. The major maize-growing areas are in NWFP (514,100 ha in 1991-92), and Punjab (311,300 ha in 1991-92). From 1975-76 to 1991-92, maize yields remained static at about 1300 kg/ha in Punjab. In NWFP, they increased from 1312 to 1507 kg/ha

Sugarcane

Sugarcane is an important cash crop of Pakistan, occupying about 896,100 ha in 1991-92: 536,200 ha in Punjab; 255,300 ha in Sindh; and 104,000 ha in NWFP. In Punjab and NWFP, the area under sugarcane has remained static since 1975-76. In Sindh, it has increased by 47 percent. Since 1975-76, sugarcane yields have increased from 36.5 to 43.4 tons/ha for Pakistan as a whole. For Punjab, the increase has been from 36.6 to 37.3; for NWFP,

Sugarcane has experienced limited improvement over the years. A basic constraint is that sugarcane does not produce viable seed in the Indus plain: Another problem is that research stations have very limited area for breeding, replicated experiments, and seed multiplication.

Date: 5th August, 2020

Day: Wednesday

Topic: Assignment#1

Give answer to the questions:

1. What are Rabi crops? Give example.

Ans. The crops that are sown in winter (October) and harvested in summer(May) are called rabi crops.
Example: Wheat,barley, gram, oil seed etc.

2. What are Kharif crops? Give example.

Ans. The crops that are grown in summer(May) and harvested in winter(October) are called Kharif crops. Example: Rice, Maize etc.

3. What is food crop?

Ans. The crops that meet the food needs of people are called food crops.

Such as wheat, rice and maize.

4. What is a cash crop?

Ans. The crops that are cultivated for the purpose of profit or money are called cash crops.

Example: tobacco, cotton, jute and sugar cane.

5. Write the name of five major crops of Pakistan.

Ans. Five most important and major crops of Pakistan are wheat, rice, maize, cotton and sugarcane.

Date: 6th August, 2020

Day: Thursday

Topic: Major Agricultural problems of Pakistan, Irrigation system and its problems

Book pg#75-78

Tutor link: <https://www.youtube.com/watch?v=9BYKBLuP4qU>

Major Agricultural problems in Pakistan:

Agriculture is the backbone of Pakistan's economic and facing cyclones of problems in Pakistan as;

- Lack of Modern Agriculture technology
- Poor Financial Position of Farmer
- Limited Cultivable Area
- Waterlogging and salinity
- Slow Growth of Allied Product
- Low per Hectare Yield
- Inadequate Infrastructure
- Uneconomic Land holdings
- Old method of Production
- Inadequate supply of Agriculture Inputs
- Lack of irrigation Facilities
- Inadequate Agriculture Research Center
- Problem of Land Reforms
- Defective Land Reforms
- Subsistence Farming
- Low Cropping intensity
- Improper Crop Rotation

- Various Plant diseases and Natural Calamities

Major means of Irrigation:

- Canals
- Tube Wells
- Karez
- Wells
- Springs

Problems of irrigation system:

- Improvement and up gradation
- Salinity and water logging issues
- Irrigation system turning during rainy weather
- water pressure issues
- over watering and under watering
- water runoff and polling
- Over exploitation of fresh ground water
- Insufficient cost recovery
- Government policy
- Wara bandi system
- Water losses in field
- Evaporation losses

Date: 7th August, 2020

Day: Friday

Topic: Assignment#2

Give answers to following questions:

- 1. Write the names of major means of irrigation in Pakistan.**

Ans. Canals, tube wells, Springs, well and Karez are means of irrigation in Pakistan.

- 2. What is a Spring?**

Ans. Spring is the natural source of water where water flows from underground to the surface of earth.

3. What is Karez?

Ans. Underground water courses are dug which are called Karez. In Baluchistan irrigation is done with these underground channels.

4. What are link canals?

Ans. Canals have been dug to transfer the water of three western rivers(indus, Jehlum and Chenab) to two eastern rivers (sutlej and byas) these are called link canals.

5. What are perennial canals?

Ans. The canals that carry water throughout the year are called perennial canals. Most of canals in Pakistan are perennial.

Date: 8th August, 2020

Day: Saturday

Topic: Assessment#7

Choose correct option:

I. Pakistan produces percent of total world cotton:

- a) 2% b) 3% c) 4% d) 5%

II. Which crop is used for food and animal fodder purpose?

- a) Wheat b) Maize c) Tobacco d) Cotton

III. Crops are grown in stepped fields are:

- a) Plains areas b) Mountain slopes c) Desert areas d) Coastal areas

IV. In which province of Pakistan karez are used for irrigation?

- a) KPK b) Sindh c) Punjab d) Baluchistan

V. A natural source from which water flows to the surface of earth from underground is called?

- a) Tube well b) Karez c) Spring d) Well

Fill in the blanks:

- I.** Farming of crops and farming of cattle is called _____.....**Agriculture**
- II.** Presently, _____% of total cultivable areas of Pakistan depends upon irrigation.....**80**
- III.** Three-fourth of total cultivable area of Pakistan is in _____.....**Punjab**
- IV.** Canal system of Pakistan consists of Dams, _____ and canals.....**Barrages**
- V.** _____ are most ancient way of acquiring underground water.....**well**

Write True or False (T or F) in front of each statement:

- I.** Agricultural sector provides a major part of Raw material. **T**
- II.** Agricultural sector is not effective in maintaining the balance of payments. **F**
- III.** Pakistan is famous for its fruits. **T**
- IV.** Cotton is used for animal fodder. **F**
- V.** Rice is an important kharif crop. **T**

Match the correct statement:

a. Sugarcane and rice	a. To install Persian wheel
b. Wheat	b. Harmful for crops
c. Underground water courses	c. Kharif crop
d. Salinity	d. Rabi crop
e. Wells are dug	e. Karez

Date:10th August,2020

Day: Monday

Topic: Exercise Chapter#7(short Questions)

Give answers to following Questions:

1. What is meant by agriculture?

Ans. Cultivation of crops and farming of cattle is called Agriculture.

2. List means of irrigation.

Ans. Canals are the most important means of irrigation. While others are tube well, Karez system, wells, springs and pools.

3. Name the important crops of Pakistan.

Ans. Wheat, rice, maize, cotton and sugarcane.

4. Describe karez and spring.

Ans. **Spring** is a natural source of where water flows from underground to the surface of earth.

Underground water courses are dug which are called karez.

Date: 11th August, 2020

Day: Tuesday

Topic: Exercise chapter#7 (long questions)

Give detail answer of following questions:

Q.1 Explain why agriculture is important?

Answer: Importance of Agriculture is described below:

I. Important source of income:

Agricultural sector is the mainstay of the world economy.

II. Source of food:

Agricultural sector provides food for the people of a country for example: grains, fruits, milk, vegetables and meat etc.

III. Source of National income:

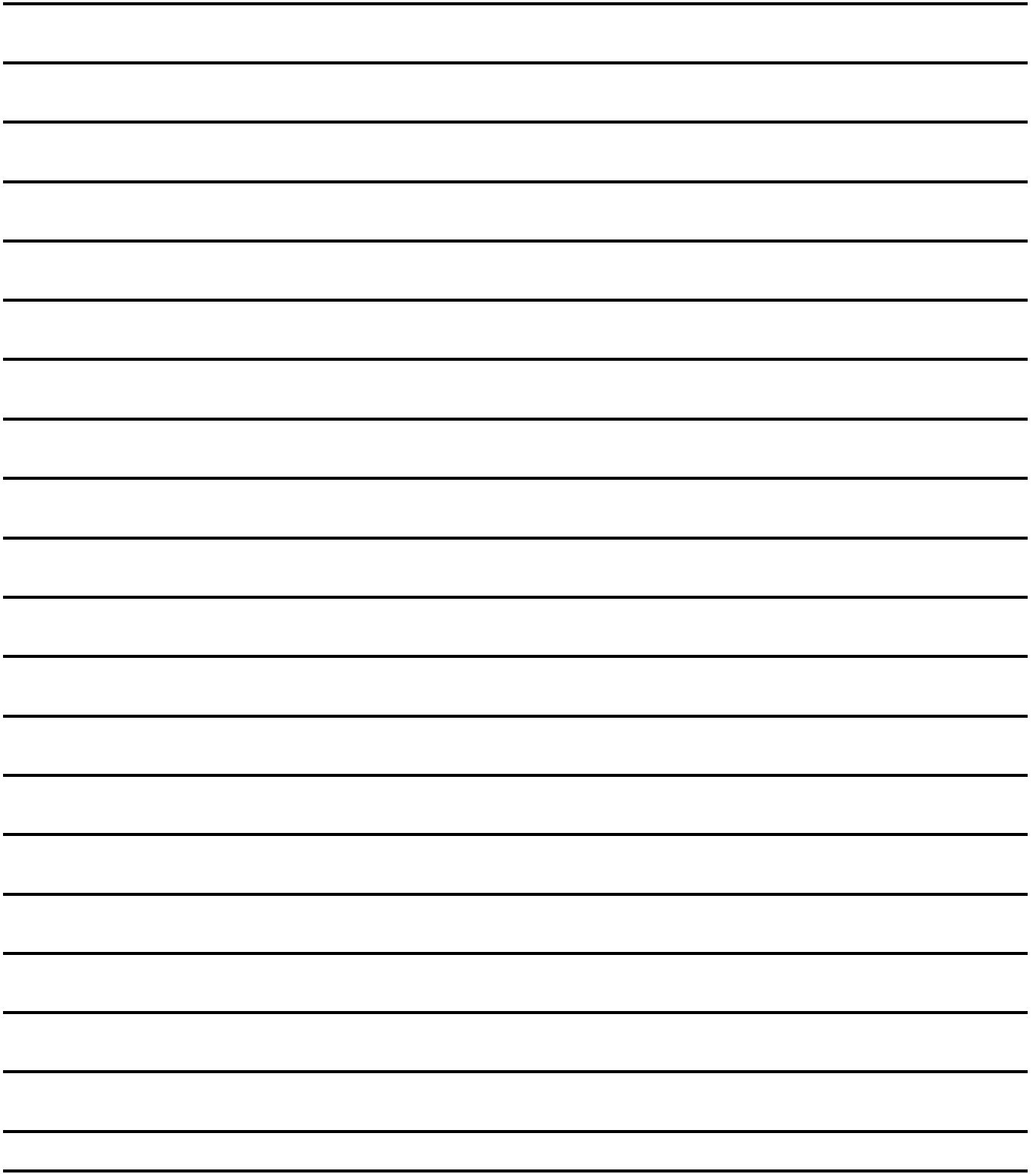
Agricultural sector is the main and most important sector of many countries.

IV. Supply of raw materials:

Agricultural sector provides the raw materials to the main producing sectors and industries.

V. Maintenance of balance of Payment:

Agricultural sector is very effective in maintaining the balance of payments. Many countries of the world receive a major income through exports which are balanced by imports expenditures.



Date: 13th August, 2020

Day: Thursday

Topic: Exercise chapter#7 (long questions)

Q.3: Describe the problems of means of irrigation.

Answer:

- I.** A great amount of water is absorbed because of unpaved water courses.
 - II.** We have no proper arrangement to store water.
 - III.** Because of silt in unpaved water courses and delay in silt clearing, water cannot reach the tail ends.
 - IV.** Level of underground water is dropping down.
 - V.** Consequently tube wells are becoming useless.
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Date:15th August,2020

Day: Saturday

Topic: Mining as an Industry

Book pg#82-84

Tutor link: <https://www.youtube.com/watch?v=Sa3aQWS6-6Y>

Mining As An Industry:

Mining is an important industry in Pakistan. Pakistan has deposits of several minerals including coal, copper, gold, chromite, mineral salt, bauxite and several other minerals. There are also a variety of precious and semi-precious minerals that are also mined. These include peridot, aquamarine, topaz, ruby, emerald, rare-earth minerals bastnaesite and xenotime, sphene, tourmaline, and many varieties and types of quartz.

Important conditions for mining:

- **Get services of mining experts**
- **Miners well-trained**
- **Best means of transportation**
- **Modern machinery**
- **Adequate financial resources**
- **Industries should be near**

Role of minerals and power resources in economy:

- **Minerals have essential role in economic and industrial development**
- **Used in industry as raw material**
- **Like Iron, Coal, Oil, Gas etc.**

Types of Mining:

Some types of mining are:

1. Hand-Panning Mining:

Hand-Panning, is a form of placer mining and traditional mining that extracts gold from a placer deposit using a pan. The process is one of the simplest ways to extract gold, and is popular with geology enthusiasts especially because of its low cost and relative simplicity.

2. Shaft-tunnel mining:

Shaft mining or shaft sinking is excavating a vertical or near-vertical tunnel from the top down, where there is initially no access to the bottom

3. Adit tunnel Mining:

In this method horizontal tunnels are dug between hill slopes. This type of mining is especially useful in extraction of Salt and Coal.

4. Open-Pit mining:

This method is used for minerals found near surface.in this method overburden is removed little by little. Open pit mining is used for mining of copper, Chromite and limestone.

5. Drilling Mining:

This is the method of extracting minerals from deeper layers by drilling a hole and use of pipes.this method is in use for oil and gas.

Date:17th August,2020

Day: Monday

Topic: Assignment#3

Give answers to the following questions:

1. What are important conditions of mining?

Answer. Important conditions for mining:

- Get services of mining experts
- Miners well-trained
- Best means of transportation
- Modern machinery
- Adequate financial resources
- Industries should be near

2. Name different types of mining used in Pakistan.

Answer. Different types of mining techniques are:

- Hand-Panning Mining
 - Shaft-tunnel mining
 - Adit tunnel Mining
 - Open-Pit mining
 - Drilling Mining
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3. Which minerals are collected using hand panning mining?

Answer. Gold is usually collected by Hand-panning mining.

4. For which minerals Driling mining is used?

Answer. Drilling mining is used for the mining of Oil and Gas usually.

5. Write about Open-pit mining.

Answer. This method is used for minerals found near surface.in this method overburden is removed little by little. Open pit mining is used for mining of copper, Chromite and limestone.

Date:18th August,2020

Day: Tuesday

Topic: Distribution of Major minerals in Pakistan

Book page : 84-87

Tutor link:<https://www.youtube.com/watch?v=WE2p6C8TyKg>

Distribution of Major Minerals in Pkaistan:

In Pakistan minerals are categorized into two major groups:

Non-Metals: Minerals other than metals.

Metals: like Iron, Copper and chromite

Mineral Oil:



Mineral oil in Pakistan has got dominating economic importance.

Major products include gasoline, petrol, kerosene oil , mobil oil , coaltar etc.

Natural Gas:

- Cheaper source of energy
- Discovered in sibbi at sui in 1952.
- Gas is used as commercial as well as domestic purposes.

Copper:

- In ancient times copper was used for coins and utensils
- Now it is used for electric cables

Coal:

- Coal is used for thermal power
- In brick kilns and commercial needs
- Pakistan has world largest coal reserves

Iron ore:

- Production of iron ore was started in 1957 in Pakistan
- Reserves of iron are more than 450 million tons

Rock salt:

- Rock salt is used in industry as well as cooking
- Pakistan has world second largest mine of salt in Khewra

Chromite:

- There are more than 50 big reserves of chromite in Pakistan
- It is being exported to different countries and also used in Karachi steel mills
- Important metal used in steel industry

Gypsum:

- Gypsum is used as a raw material in the phosphate fertilizers
- It is used as raw material in cement and paper industry
- Also in plaster of Paris, paints, rubber and sulphuric acid industry

Lime stone:

- Extremely useful mineral
- Used in glass, soap, steel and bleaching powder industry

Marble:

- Marble of different colors and types is found in Pakistan
- Used for surfacing of walls and floors of buildings

Date: 19th August, 2020

Day: Tuesday

Topic: Assignment#4

Give answer to the following questions:

1. Write name of some non-metallic minerals.

Answer. Gypsum, coal, oil, Gas, Limestone and marble etc.

2. Write name of some metallic minerals.

Answer. Gold, iron ore, copper, chromite, silver and aluminium.

3. Write name of major products of mineral oil.

Answer. Major products of mineral oil includes; Gasoline, Kerosine Oil, Petrol, Mobil oil, wax, coal tar etc.

4. Write importance of Gypsum.

Answer. Gypsum is used as a raw material in phosphate fertilizers. It is also used in production of cement, paper, plaster of Paris, sulphuric acid, paints, and rubber.

5. Write the name of areas where chromite is found.

Answer. Chromite reserves are found in Baluchistan in Muslim bagh, Chaghi and Kharan areas.
Some reserves were also found in Malakand and Mehmand agency of KPK.

Date: 20th August,2020

Day: Thursday

Topic: Power sources of Pakistan

Book page(88-90)

Tutor link:<https://www.youtube.com/watch?v=yNbySCPHGS0>

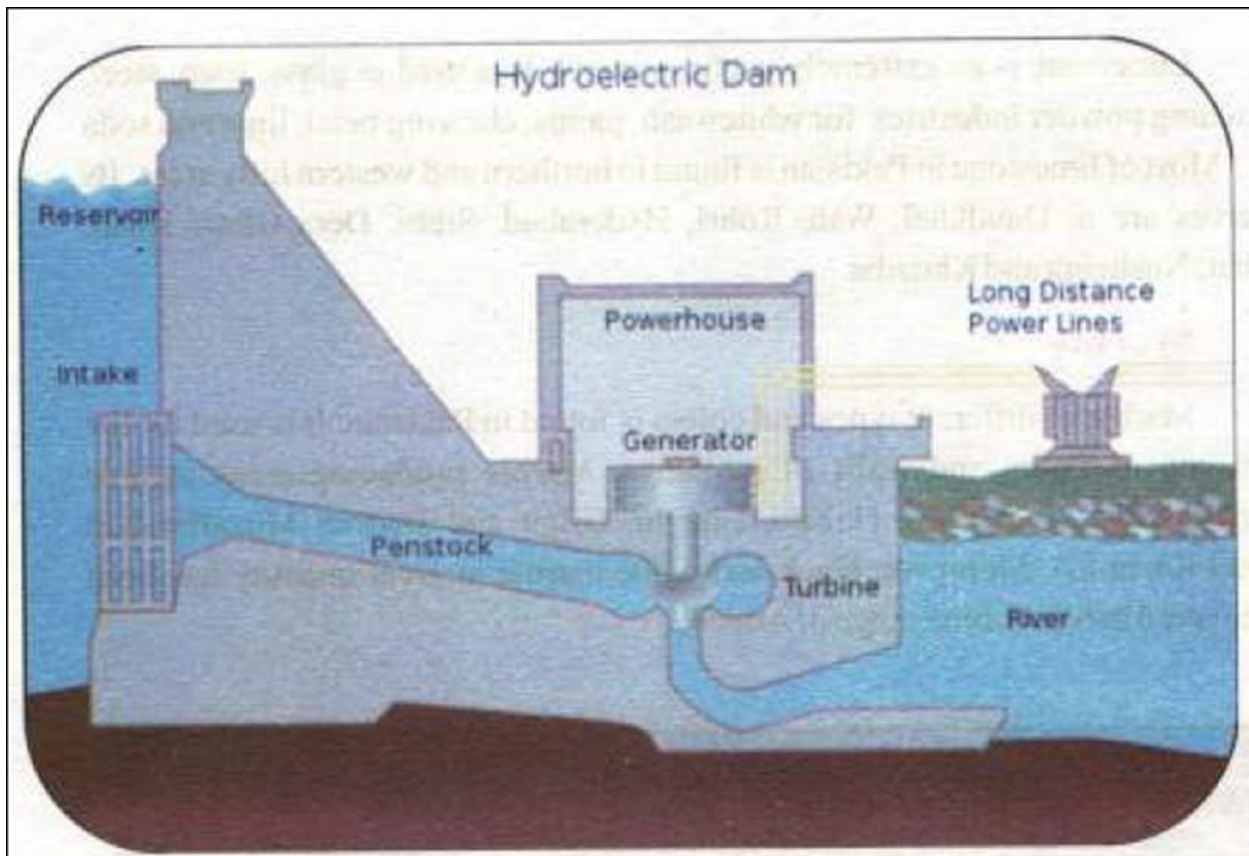
Power sources of Pakistan:

Electricity:

Electricity generating resources of power are as follows:

(i) Hydro Power

Northern and north-western hilly regions are very important for hydro electricity where natural environment is suitable for dams. In plains waters of rivers and canals are used to produce hydro power.



(ii) Thermal-Electric Power

In Pakistan, thermal power plants are running with gas, oil and coal. Thermal power production units are operational in Karachi, Lahore, Multan, Faisalabad, Guddu, Jam Shoro, Muzaffargarh, Sakkhur, Larkana, Kotri, Pasni, Gilgit and Kot Addu. To cater the future needs of electric power in Pakistan many projects are in place and other are in progress.

(iii) Nuclear Power

Pakistan Atomic Energy Commission (PAEC) is responsible for the planning, installation and operation of nuclear power plants in the country. At present time, atomic energy is playing an important role in catering the needs of energy throughout the world.

Karachi Nuclear Power Plant (KANUPP) is the first such plant in Pakistan. Two more atomic energy plants have been installed near Chashma town of district Mianwali: Chashma Nuclear Power Plant I and Chashma Nuclear Power Plant II.



(iv) Solar Power

A view of Karachi Nuclear Power Plant

Energy extracted from sunlight is called solar power which is being used for electric power generation. At present, solar power is being utilized in Pakistan on a very small scale, for example running small machinery and motors. Soon the solar energy will be the main source of energy all over the world because other sources of energy are expensive and hard to access.

(v) Wind Energy

Use of winds for power generation is called wind-electric power. In Pakistan plans are being implemented to generate electric power with the help of

wind. Windmill consists of three or four blade fans fixed on high poles. These fans are called turbines. Wind moves these fans and their energy is converted to electric power.



Windmill Turbines

Date: 21st August,2020

Day: Tuesday

Topic: Assignment#5

Give answer to following questions:

1. What is meant by PAEC?

Answer. PAEC stands for Pakistan Atomic Energy Commission.

2. Write names of Nuclear power Plants in Pakistan.

Answer. 1. Karachi Nuclear Power Plant 2. Chashma Nuclear Power Plant I 3. Chashma Nuclear Power Plant II .

3. What is solar energy?

Answer. Energy extracted from sunlight being used for generation of electrical power generation this is called solar energy.

4. Define Wind-electric power.

Answer. The use of wind energy for power generation is called Wind-electric power.

Date: 22nd August,2020

Day: Wednesday

Topic: Assessment of Chapter#8 Mining and Power

Note: Solve the given assessment by following the key given on next page.

Choose correct option:

- I. First atomic plant of Pakistan was installed at:**
a) Chashma b) Lahore c) Islamabad d) Karachi
- II. Reserves of which mineral are more than 450 million ton?**
a) Coal b) Salt c) Gypsum d) Iron
- III. Extraction of valuable minerals and other materials from the earth is called:**
a) Mining b) Earth crust c) Agriculture d) Geography
- IV. Biggest natural gas reserve in Pakistan are located in the Province of :**
a) KPK b) Punjab c) Baluchistan d) Sindh
- V. In Pakistan, Oil and gas development corporation limited (OGDCL) was established in:**
a) 1961 b) 1971 c) 1973 d) 1970

Fill in the blanks:

- I.** Minerals are used in industry as _____ **Raw material**
- II.** Adit tunnel mining is especially useful for mining of _____ and coal. **Salt**
- III.** Gypsum is used as a _____ in Phosphate fertilizers. **Raw material**
- IV.** Black and white marble in great quantity has been discovered in _____ of Attack. ... **Kala chitta range.**

V. Energy extracted from Sunlight is called _____..... **Solar power**

Write True or False (T or F) in front of each statement:

- I. Use of sun light for power generation is calls wind-electric power.
- II. Oil and Gas development Corporation Limited was established in 1916.
- III. Mineral oil is used in cooking and frying.
- IV. Marble is a metallic mineral.
- V. In ancient times copper was used only for coins and utensils.

Match the correct statement:

a. Extensive reserves of salt in	a. Cheap source of energy
b. First nuclear power plant in	b. Khewra
c. Hydro-electric energy	c. Karachi
d. Chromite	d. From falling water
e. Natural gas	e. Steel industry

Write True or False (T or F) in front of each statement:

- I. F
- II. F
- III. F
- IV. F
- V. F

Match the correct statement:

- a. Khewra
- b. Karachi
- c. From falling water
- d. Steel industry
- e. Cheap source of energy

Date: 24th August,2020

Day: Monday

Topic: Exercise chapter#8 (Short Questions)

Give short answer to the following questions:

- I. **Write the names of five non-metal minerals.**

II. How wind electricity is generated?

Answer: Wind electricity is generated by using the energy of wind. Wind mills are rotating turbines that rotate when wind flows from one place to other place.

III. Define Mining.

Activity#8

Title: Visit to Khewra Salt Mines

Dear students you know in these days we cannot visit the far more place,so we have a documentary for you.

Watch the video....

<https://www.youtube.com/watch?v=MkYvWXhci9g>



Date: 25th August,2020

Day: Tuesday

Topic: Exercise chapter#8 (Long Questions)

Give answer in detail:

Q.1: point out necessary conditions for mining.

Answer: To get access to minerals treasure and mining industry :

- It is necessary to get services of mining experts
- Miners should be well trained
- Best means of transportation should be available to send minerals to the industry
- Modern machinery also should be available
- Thorough digging of mines and adequate financial resources for the extraction of minerals is of utmost importance, so that work may continue without any interruption
- Industries should be there or new industries should be established

Date: 28th August, 2020

Day: Friday

Topic: Exercise chapter#8 (Long Questions)

Q.2: Explain the role of minerals and power resources in the economy of a country.

Answer: In present industrial age, minerals have an essential role in the industrial and economic development of a country.

- They are important for the economic development and affluent society
 - What is important is to take full advantage of them to steer the national economy towards opulence
 - Minerals are used in industries as raw material
 - Among them iron is of utmost importance
 - Oil, coal and natural gas provide energy to industries
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➤ **Energy**

This is needed to work the machines in a factory. Early industries were near to coalfields. Today, electricity allows more freedom.

➤ **Transportation**

A good transport network helps reduce costs and make the movement of materials easier.

➤ **Market**

An accessible place to sell the products is essential for many industries:

- those that produce bulky, heavy goods that are expensive to transport
- those that produce perishable or fragile goods
- those that provide services to people

➤ **Government policies**

Industrial development is encouraged in some areas and restricted in others. Industries that locate in depressed ('Development') areas may receive financial incentives from the government.

Date: 31st August, 2020

Day: Monday

Topic: Assignment#6

Give answers to following questions:

1. What is Industry?

Answer: Industry is a place where investors provide different raw materials and natural resources to skilled labor to produce different products.

2. Write at least three factors that influence the location of industry.

Answer: The factors affecting the location of an industry are: Raw material, Manpower, capital, transportation system, market and government policies.

