Geography 1. Agriculture

Exercise 1 A. Question Fill in the blanks: Agriculture is a activity. **Answer** primary Explanation: Primary is the sector which is associated with the production of raw materials and basic food items. Activities associated with the primary sector include agriculture, mining, farming, grazing, hunting, fishing and so on. So agriculture is called a primary activity. 1 B. Question Fill in the blanks: Crops can be broadly divided into food and crops. **Answer** cash Explanation: Crops can be divided into food and cash crops. Food crops are cultivated for the purpose of fulfilling basic food requirements such as fruits, vegetables, pulses, and rice and millets. Cash crops are those crops which are cultivated for commercial purpose only. These crops are grown mainly for profit purpose. Examples are coffee, tea, cotton, tobacco, jute, and oilseeds. 1 C. Question Fill in the blanks: In Irrigation water is delivered to the roots of the plant. Answer

Explanation: Drip irrigation is a type of micro-irrigation system that saves water and nutrients by allowing water to drip slowly to the roots of the

drip

plants either from above the soil surface or buried below the surface. In this system, water is delivered at or near the root zone.

1 D. Question

Fill in the blanks:		
Climatic factors like	and rainfall	affect agriculture.

Answer

Temperature

Explanation: Climatic factors are among the major factors which agriculture. These factors include temperature and rainfall. Temperature, in turn, is affected by altitude. The crops which require low temperature are grown on higher altitudes and vice versa. Rainfall and humidity also affect the cropping pattern.

1 E. Question

Fill in the blanks:

Raising only one crop at a time in a field is called......

Answer

Uni-cropping or mono-cropping

Explanation: Mono-cropping is the agricultural practice of growing a single crop year after year on the same land. There is an absence of crop rotation. The crops which are grown mainly through this technique are soybeans, corn, and wheat.

2 A. Question

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The are the best suited for agriculture.

- A) Plateaus
- B) Plains
- C) Mountains

Answer

plains are more suitable for agriculture than plateaus and mountains because these are more fertile. Due to the presence of rivers, the irrigation is well developed in plain areas. The topsoil on the plateaus also get washed away and is deposited on the plains making it more fertile for the agriculture. Plain fields are difficult to be found in the mountains, and also there is excessive rainfall and snowfall which affect crops adversely.

2 B. Question Choose the correct answer and fill in: Infarming, crops are raised on a large scale. A) Subsistence B) Shifting C) Commercial **Answer** commercial farming also known as "extensive" farming is the farming in which crops are grown on a huge scale because the main purpose of growing crops is to earn a profit. The crops are grown for commercial use only. Farmers grow crops in order to sell the product to the other person or government in exchange for money. 2 C. Question Choose the correct answer and fill in: Shifting agriculture in Brazil known as A) Jhum B) Roco C) Milpa **Answer** Shifting agriculture in Brazil is known as "roco" or "roca". It is practiced by the rural population and tribal who move to the new plots of land and use it until the fertility of the land is dropped. 2 D. Question Choose the correct answer and fill in: Rice is acrop. A) Temperate B) Cash C) Tropical **Answer**

Rice is a tropical crop which requires high temperature and abundant sunlight for its growth. Rice also requires abundant rainfall.

2 E. Question

Choose the correct answer and fill in:

Where rainfall is inadequate is necessary.

- A) Irrigation
- B) Temperature
- C) Snow

Answer

Availability of water is a necessary condition for any crop. Irrigation is the method through which a controlled amount of water is supplied to the crops at needed intervals especially in the areas of low or inadequate rainfall or areas where there is less than average rainfall.

3. Question

Match the following:

1. Subsistence agriculture i) Hillslopes

2. Nile valley civilization ii) Central pivot irrigation

3. Commercial agriculture iii) Egypt

4. Circular fields iv) Crops for sale

5. Tea v) Small land holdings

Answer

1. Subsistence agriculture – small land holdings

Explanation: In subsistence agriculture, the farmer grows food which is enough for his family and himself, and this requires only a small piece of land. Hence the correct answer is small land holdings as it is practiced on a small piece of an area rather than a large one which is used in commercial farming.

2. Nile valley civilization - Egypt

Explanation: The Nile valley civilization is located on the African continent particularly in Egypt. It is one of the ancient river valley civilizations situated along the banks of the river Nile in Egypt. Evidence suggests that the civilization was inhabited as far back as 700,000 years ago by Neolithic and Paleolithic Man.

3. Commercial agriculture – crops for sale

Explanation: In commercial agriculture or extensive agriculture crops are raised on a very large scale for commercial purpose. The main aim of growing crops on such a large scale is profit. Farmers sell their produce to the other person and get money in return. Hence the crops are grown for sale.

4. Circular fields – Central pivot irrigation

Explanation: through central pivot irrigation a circular piece of land is irrigated. It is also called water wheel and circle irrigation. It is a method in which a circular area centered on the pivot is irrigated with sprinklers often creating a circular pattern when viewed from above.

5. Tea – hill slopes

Explanation: Tea is grown on hill slopes because tea demands evenly distributed rainfall with no waterlogging. The hilly slopes provide easy drainage of the rainwater hence prevents water from being locked in. Also, tea plantation requires loamy soil which is mostly found on hilly slopes.

4 A. Question

Give short answers:

Mention the Geographical factors determining agriculture.

Answer

Major geographical factors that affect or determine the agriculture are climatic factors like temperature high or low and rainfall or precipitation and the humidity content of the air, landforms like plain areas or plateaus or hilly regions or deserts, types of soil and topography of land and the related phenomenon of soil erosion, availability of water and labor.

4 B. Question

Give short answers:

What is meant by multiple cropping?

Answer

Multiple cropping is the practice of growing two or more crops in the same piece of land and in the same growing seasons instead of one single crop. Mixed cropping is found in many agricultural traditions. For example in Garhwal region of Himalaya, a practice called baranaja involves sowing twelve or more crops on the same plot including various types of beans, grains, and millets, and harvesting them at different times.

4 C. Question

Give short answers:

Write a short note on alluvial soil.

Answer

Alluvial soil is a fine-grained fertile soil deposited by water flowing over flood plains or in river beds. Most alluvial soils are derived from the sediment deposited by the river Ganga in the Indo-Gangetic plain ranging from Punjab in the west to the West Bengal and Assam in the east as well as in the coastal areas of northern parts of Gujrat, Narmada, and Tapi valleys.

The crops like wheat, rice, barley, maize, bajra, jawar, black gram, chickpea, soybean, groundnut, jute, cotton, tobacco, pigeon pea, green pea, etc. are grown in alluvial soil.

4 D. Question

Give short answers:

What is plantation agriculture? Name the plantation crops.

Answer

Plantation agriculture is a form of commercial farming in which involves a heavy capital and focus on cash crops like tea, coffee, and rubber, cotton, sugarcane, cocoa, sisal, oilseeds, palms, and fruit, etc. Large lands are needed for this type of agriculture. Plantation agriculture is mainly found in countries which have a tropical climate like Sri Lanka, Malaysia, India, Indonesia, tropical and sub-tropical America.

5 A. Question

Answer each of the following in a paragraph:

What factors affect agriculture? Write a short note on any 3 factors.

Answer

Factors that affect agriculture are climate and temperature, soil and topography, landforms, availability of water and labor. These factors have been divided into the following categories:

- A) <u>Climatic factors</u>: Climatic factors like temperature and rainfall affect agriculture. Most plants cannot grow if the temperature falls below 6 degree Celsius or the soil frozen for five consecutive months. Rainfall is a key factor in plant growth. The greater the amount of the average temperature the greater the amount of water required for plant growth.
- B) <u>Human factors</u>: availability of labor market is also a great factor which determines agriculture. If there is a shortage of labour then there is the least productivity from agriculture, and if the labor is abundant, then the agricultural growth is high.
- C) Other geographical factors: Agriculture also depends on Wind, slope, and soil. Soil type influences crop cultivation because different crops prefer different soils. Wind can have a destructive effect on the crops. Like hurricane can prove very destructive for the crop plantation. High-pressure winds also cause soil erosion. The angle of the slope will affect the type, depth and the moisture content of the soil.

All the factors work on their own and affect agriculture diversity and distribution.

5 B. Question

Answer each of the following in a paragraph:

What is irrigation? Discuss the various types of irrigation.

Answer

Irrigation is a method of supplying water to the crops where there is inadequate rainfall, or unreliable rainfall or water is not available. A controlled amount of water is supplied to crops at needed time intervals.

The following are the types of irrigation:

- 1. <u>canal irrigation</u>:- in this type of irrigation water is taken out of rivers, canal, channel or ditch. It is an effective source of irrigation in areas of low-level relief, deep, fertile soil and extensive command areas. Thus the main concentration od canal irrigation is in the northern plains of India.
- 2. <u>sprinkler irrigation</u>:- It is a method of irrigation in which water is sprinkler is used to sprinkle water in the fields. The sprinkler is a device used in agricultural crops, lawns, landscapes, golf, courses, and other areas. It is a method of applying water to a controlled manner in that it is similar to rainfall.
- 3. <u>Central Pivot Irrigation:</u> also known as a water wheel or circle irrigation, it is a method of crop irrigation in which equipment rotates around a pivot and crops are watered with sprinklers. In this way, a circular area is covered when viewed from above.
- 4. <u>Drip Irrigation</u>:- in this type of irrigation method water is allowed to drip slowly directly to the roots of plants via a pipe which is fixed at the base of the plants. This system helps in saving water and nutrients of the soil and also minimizes evaporation.

Conclusion:- Different sources of irrigation are found at different places, for example, canal irrigation is developed in plain areas whereas on stony ground level lakes or groundwater are used as a means of irrigation. The need for irrigation arises due to irregular, uncertain and limited rainfall.

5 C. Question

Answer each of the following in a paragraph:

Complete the table:

Types of Agriculture	Subsistence Agriculture	Commercial Agriculture	Shifting agriculture	Plantation agriculture	200 53
Description					
Crops					
Areas					

Answer

Types of agriculture	Subsistence agriculture	Commercial agriculture	Shifting agriculture	Plantation agriculture	Mixed agriculture
Description	Farmers grow the crop in order to sustain their families. It is practiced on small land holdings.	Crops are grown mainly to earn a profit. Farmers sell their produce in exchange for money.	It is a form of agriculture in which a piece of land is cleared of vegetation and cultivated for a few years and then abandoned for a new area until its fertility is restored.	Plantations are very large farms in which crops are grown for profit. It involves heavy capital investment and focuses on crops like tea, coffee, and rubber.	In mixed farming, crops are raised along with the rearing of animals.

Crops	Corn, millets, beans, pulses, wheat, and rice.	Sugarcane, rubber, coffee, tea, maize, fruits, and vegetables.	Maize and manioc, Sorghum Sugarcane, plantain, vegetables, and yams.	Tea, rubber, coffee, sugarcane, cotton, and oilseeds.	For example, the same farmland may grow cereal crops and keep cattle, sheep, pigs, poultry.
Areas	India, China, Cambodia, Mexico, Peru and Vietnam.	India, Sri Lanka, Indonesia, China, U.S and Japan.	South America, Africa and many parts of Europe.	Asia, Africa and tropical and subtropical America.	India, Malaysia, Indonesia, Afghanistan, China and Russia.

Formative Assessment

1. Question

Project Work:

Visit and observe an agriculture field near your place.

Answer

I visited our mustard fields. I observed that the plants were fully bloomed with yellow color flowers and the field was irrigated. It was well bounded with a fence so that no stray cattle destroy the crops. Nearly all other nearby fields also had the same crop.

2. Question

Collect Picture:

Collect pictures to show the various steps taken to grow a crop. Start with preparing the field, ploughing, sowing, transporting, irrigation, harvesting.

Answer

a. Preparing the field.



b. Ploughing.



c. Sowing.



d. Irrigation.



e. Harvesting.



f. Transportation.



3. Question

Word Jumble:

Rearrange the following letters by using the given hints.

1. LKESRPNIR: Method of irrigation

2. VAUALLILA: Type of fertile soil

3. OPONRCOM: Only one type of crop

4. HCCAONIN: A cash crop

5. ALMPI: Shifting agriculture

Answer

1. SPRINKLER

It is a method of irrigation in which water is sprinkler is used to sprinkle water in the fields. A sprinkler is a device used in agricultural crops, lawns, landscapes, golf, courses, and other areas.

2. ALLUVIAL.

Alluvial soil is a fine-grained fertile soil deposited by water flowing over flood plains or in river beds. It consists of silt, sand, clay, and gravel. It is mainly found in the Indo-Gangetic plains which consist of Punjab, Haryana, Bihar, West Bengal, Uttar Pradesh and some parts of Madhya Pradesh.

3. MONOCROP

A crop which is grown as a single crop year after year on the same land without practicing crop rotation is called monocropping, and the crop is called monocrop. Corn, Soybeans, and wheat are three common monocrops.

4. CINCHONA.

It is one of the examples of a commercial crop mostly trees native to the Andes of South America. The bark of some species contains quinine which is useful against treating malaria.

Answer: MILPA

It is a type of shifting agriculture which is practiced in Central America. The word Milpa means cultivated fields. Though different interpretations are given to it, it usually refers to a cropping field. It was practiced by Maya people to produce Maize, Beans, and Squash.