

Grade X - Geography Lesson 4 - Agriculture

Objective Type Questions

(1 Mark each)

I. Multiple choice questions

1. Match the following:

Column A			Column B		
i)	Uttar Pradesh, Maharashtra	(A)	Apples, Pears, walnuts and Apricots		
ii)	Tamil Nadu, Kerala, Karnataka	(B)	Oranges		
iii)	Himachal Pradesh, Jammu and Kashmir	(C)	Mangoes		
iv)	Nagpur and Meghalaya	(D)	Bananas		

- a) (i)-(B), (ii)-(C), (iii)-(D), (iv)-(A)
- b) (i)-(D), (ii)-(C), (iii)-(B), (iv)-(A)
- c) (i)-(C), (ii)-(D), (iii)-(A), (iv)-(B)
- d) (i)-(A), (ii)-(B), (iii)-(C), (iv)-(D)
- 2. Barley: Rabi crop, Cotton: Kharif crop,: Zaid crop.
 - a. Wheat
- b. Mustard
- c. Soya bean
- d. Cucumber
- 3. A type of millet rich in iron, calcium, other micro nutrients and roughage is

- a. Wheat
- b. Rice
- c. Tea
- d. Ragi
- 4. Which one of the following is a leguminous crop?
 - a. Jowar
- b. Pulses
- c. Millets
- d. Seasamum
- 5. Analyze the information given below, considering one of the following correct options:

It is known as the golden fibre. Jute grows well on well-drained fertile soils in the flood plains where soils are renewed every year. A high temperature is required during the time



of growth. West Bengal, Bihar, Assam, Odisha and Meghalaya are the major jute producing states. It is used in making gunny bags, mats, ropes, yarn, carpets and other artefacts. Due to its high cost, it is losing market to synthetic fibres and packing materials, particularly the nylon.

- a) Jute
- b) Cotton
- c) Rubber
- d) Silk
- 6. Study the picture and answer the question that follows:



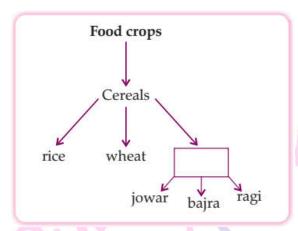
Which type of cultivation is that?

- a. Wheat cultivation
- c. Sugarcane cultivation

- b. Rice cultivation
- d. Tea cultivation
- 7. Find the incorrect option from the following:
 - a. Groundnut if a Kharif crop and accounts for about half of the major oil seeds produced in the country.
 - b. Gujarat was the largest producer of groundnut followed by Rajasthan and Tamil Nadu in 2015-16.
 - c. Linseed and mustard are Kharif crops.
 - d. Sesamum is a Kharif crop in north and Rabi crop in south India.
- 8. Observe the flow chart given below.







What will come in the empty box?

- a. Gram
- b. Maize
- c. Millets
- d. Pulses
- 9. What is not common between primitive subsistence farming and intensive subsistence farming?
 - a. Both require the use of modern machinery.
 - b. Both are done on large tracts of land.
 - c. Both require large amounts of credit.
 - d. Both are labour-intensive.
- 10. Look at this picture of Maahir, who practise organic farming from his rooftop.



What is Most LIKELY to be true about Maahir?

- a. He does not have enough money to buy crops from the market.
- b. He is practising a type of farming that is environmentally-friendly.
- c. He is only growing kharif crops on his rooftop.
- d. He is a farmer by profession.
- 11. Kamal uses high yielding variety (HYV) seeds and chemical fertilisers to increase his wheat production.



Which type of farming is Kamal practicing?

- a. Intensive subsistence farming
- b. Primitive subsistence farming
- c. Commercial farming
- d. Organic farming
- 12. Which one of the following is announced by the government in support of a crop?
 - (A) Maximum Support Price
 - (B) Minimum Support Price
 - (C) Moderate Support Price
 - (D)Influential Support Price
- 13. ICAR refers to:
 - (A) International Council of Aeronautical Research
 - (B) Indian Council of Agricultural Research
 - (C) Indian Council of Animal Research
 - (D)International Commission for Agricultural Research
- 14. Grouping of small land holding into a bigger one is called:
 - (A) Ceiling of land holding

(B) Collectivization

(C) Cooperative Farming

- (D) Consolidation of land holding
- 15. Find the incorrect option from the following:
 - (A) Kisan Credit Card (KCC), Personal Accident Insurance Scheme (PAIS) are some other schemes introduced by the Government of India for benefit of the farmers.
 - (B) Moreover, special news bulletins and entertainment programmes for farmers were introduced on the radio and television.
 - (C) The government also announces minimum support price, remunerative and Procurement prices for important crops to check the exploitation of farmers by speculators and middlemen.
- 16. Which of the following was the main focus of our First Five Year plan?



A) Price of p	pulses		B) Agriculture
C) Industria	alisation		D) Globalisation
17. Identify the	correct feature of I	CAR.	
(A) It is an	autonomous body		
(B) It is res	ponsible for coordinat	ing agricu	ultural education and research in India
(C) Headqua	arters are located in K	rishi Bhav	van, New Delhi.
(D) All of t	he Above		
18. Which of the f	following crops are grow	n with the	ne onset of monsoons and are harvested i
the months of	September - October		
(A) Rabi	(B) Kharif	(C) Zo	Cadi (D) None of the above
19. 'Slash and burr	n' agriculture is a		
(A) Shifting	agriculture		(B) Intensive agriculture
(C) Commerci	ial agriculture		(D) None of these
20. Grapes are main	ly produced movement w	as initiated	ed by
(A) Meghalay	va .		(B) Himachal Pradesh
(C) Mizoram			(D) Andhra Pradesh
21. Bhoodan-Gramdo	an movement was initiate	d by	
(A) Mahatma	Gandhi		(B) Jawaharlal Nehru
(C) Vinoba B	have		(D) Bal Gangadhar Tilak
22. Grouping of sm	all land holding into a b	igger one	is called
(A) ceiling on	land holdings		(B) collectivisation.
(C) cooperati	ve farming		(D) consolidation of land buildings.
23. Which of the f	following is not a <mark>charac</mark>	cteristic o	of 'Intensive Subsistence Farming'?
(A) This is p	practised in areas <mark>of</mark> high	gh populat	tion
(B) It is an e	xample of labour-in <mark>te</mark> nsi	ve farming	3
(C) High does	s of biochemical inp <mark>uts a</mark>	re used.	
(D) It is an e	xample of commercial fo	irming.	~ ^ ^
24. Intensive subsi	stence farming is pract	ised in ar	ea of
(A) high popu	ulation		(B) low population
(C) deserts			(D) thick forests
25. Which one of t	the following statement	s is incorr	rect as regards to commercial farming?



- (B) Crops are grown for sale (C) Family members are involved in growing crops. (D) Practised on large land holdings. 26. Which one of the following is a rabi crop? (A) Rice (B) Wheat (C) Bajra (D) Jowar 27. The largest tea producing state of India is (C) Andhra Pradesh (D) Arunachal Pradesh (A) Karnataka (B) Assam 28. A type of millet rich in iron, calcium, other micro nutrients and roughage is _____. (A) Bajra (B) Rajma (C) Jowar (D) Ragi 29. Which of the following can be harnessed to grow a wide range of high - value crops? (B) Use of fertilizers (A) Irrigation system (C) India's diverse climate (D) Bhoodan and Gramdan 30. Which of the following is recognized as a powerful supplement in inventing new hybrid varieties of seeds? (A) Organic Farming (B) Genetic engineering (C) Green Revolution (D) Globalization 31. Identify the crop with the help of the following features. It is a Kharif crop. Requires high temperature, (above 25°C) and high humidity Requires annual rainfall above 100 cm and in the areas of less rainfall, it grows with the help of irrigation. Ans: Rice I. Assertion & Reason Directions: In the following questions, a statement of assertion (A) is followed by a statement of reason (R). Mark the correct choice as: (A) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A). (B) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A).
- 1. Assertion (A) : Agriculture is an old economic activity.

(C) Assertion (A) is true but reason (R) is false.

(D) Assertion (A) is false but reason (R) is true.



Reason (R) : Farming varies from subsistence to commercial type

Ans.: Option (B) is correct.

2. Assertion (A) : Tea is an important beverage crop introduced in India initially by the British.

Reason (R) : In 2015, India was the second largest producer of tea after China.

Ans.: Option (B) is correct.

3. Assertion (A) : India's primary activity is agriculture.

Reason (R) : Two-thirds of its population is engaged in agricultural activities.

Ans.: Option (A) is correct.

4. Assertion (A) : Plantation has an interface between agriculture and industry

Reason (R) : Plantation is a type of commercial farming, a single crop is grown on a large area.

Ans.: Option (A) is correct.

5. Assertion (A) : Crops are grown depending upon the variations in soil, climate and Cultivation practices.

Reason (R) : Crops are also grown according to the availability of water.

Ans.: Option (B) is correct.

6. Assertion (A) : Organic farming is much in voque.

Reason (R): In organic farming, crops are grown using high doses to increase production.

Ans.: Option (C) is correct.

7. Assertion (A) : A few economists think that Indian farmers have a bleak future if they continue growing food grains on the holdings that grow smaller and smaller as the population rises.

Reason (R): Indian farmers should diversify their cropping pattern from cereals to high-value crops.

Ans.: Option (A) is correct.

8. Assertion (A) : Indian farmers should diversify their cropping pattern from cereals to high value crops.



Reason (R): This will increase income and reduce environmental degradation simultaneously.

Ans.: Option (A) is correct.

9. Assertion (A) : Plantation has an interface of agriculture and industry.

Reason (R) : Plantation is a type of commercial farming, a single crop is grown on a large area.

Ans.: Option (A) is correct.

10. Assertion (A) : Biochemical inputs and irrigation are used for obtaining expensive production.

Reason (R) : Doses of biochemical input are used to grow crops rapidly.

Ans.: Option (D) is correct.

I. Very Short Answer Type Questions

(1 Mark each)

1. Why Jhumming is a primitive subsistence farming in India?

Ans. Jhumming is practiced in hilly areas of the North Eastern states of India. The farmers use primitive tools and without the application of modern technology and modern input and it only provides basic food grains for subsistence level. Hence jhumming is considered primitive subsistence farming.

2. Which types of crops are grown in intensive subsistence farming?

Ans. Intensive subsistence farming yields two types of crops- wet and dry. While the wet crops include paddy, the dry ones vary from wheat, pulses, maize, millets, sorghum, soya beans, tubers, and vegetables.

3. What components are involved in sericulture?

Ans. Sericulture involves:

- (i) cultivation of food plants of the worms,
- (ii) rearing of silkworms, and reeling and spinning of silk.
- 4. Which is the most important commercial crop in India?
- 5. State any two importance of oilseeds.



- Ans. (i) Oil seed such as groundnuts are edible and used as food source.
 - (ii) Some oil seeds also have medicinal value and are used in the manufacture of medicines.
- 6. What are the primary objectives of the food security policy of India?
- Ans. The primary objectives of the food security policy of India are to:
 - (i) Ensure availability of food grains to the common people at an affordable price.
 - (ii) It has enabled the poor to have access to food.
- 7. Name any two agricultural reforms introduced by the Government of India.
- 8. What was the main objective of land reforms in India? Mention any two.

Ans. Some of the most important objectives of land reforms in India are as follows:

- (i) Rational use of resources
- (ii) Raising production level
- (iii) Removal of exploitation
- (iv) Social welfare
- (v) Planned development
- (vi) Raising the standard of living.
- 9. What steps were taken by the Indian Government for a comprehensive land development programme?

Ans. Provision for crop insurance against drought, flood, cyclones, fire and disease, establishment of Grameen banks, Cooperative societies and banks for providing loan facilities to the farmers at lower rates of interest were some important steps in this direction.

10. What are the institutional reforms of the Indian agriculture?

Ans. The institutional reforms of the Indian agriculture are:

- (i) Land reforms: Collectivisation, consolidation of holdings, cooperation and abolition of zamindari.
- (ii) Agricultural reforms: Green revolution and White revolution.
- 11. _____ is a gene modified seed used vastly in India.

Ans. Cotton



12. India is thesecond largest producer of sugarcane only after ______.

Ans. Brazil

13. _____ is the Golden fibre of India.

Ans. Jute

14. _____ is a programme introduced by the Government that has resulted in increased production of food grains.

Ans. Green Revolution

15. Kerala is the largest producer of _____ in India.

Ans. Rubber

16. The crop grown in black soil is Rice. (True/False)

Ans. False.

17. Till today cotton is one of the important items of export from India. (True/False)

Ans. True.

18. Castor seed is grown both as Rabi and Kharif crop. (True/False)

Ans. True

19. The main characteristic feature of commercial farming is the use of high doses of modern inputs. (True/False)

Ans: True

20. Watermelon is grown during Zaid season. (True/False)

Ans. True

21. Match the columns.

	Column A		Column B
(a)	Leading producer of Maize	(i)	Kerala
(b)	Leading rice producing state	(ii)	Karnataka
(c)	Leading sugarcane producing state	(iii)	West Bengal
(d)	Leading producer of rubber	(iv)	Uttar Pradesh

Ans. (a) (ii), (b) (iii), (c) (iv), (d) (i)

22. What is the keyword today in Indian agriculture?



Ans. The keyword today in Indian agriculture is "gene revolution" which includes genetic engineering.

23. Name any one 'rabi crops'

Ans. Wheat, Barley & Peas.

24. Name the type of farming in which crops are grown using primitive tools.

Ans. Primitive Subsistence farming.

Name any two states of India where jhumming is practised.

Ans. North-eastern states of Assam, Meghalaya, Mizoram, Nagaland, Manipur and Chhattisgarh and Andaman and Nicobar Islands.

- 26. Which crop is commercial crop in one state while subsistence crop in another state? Ans. Rice.
- 27. What type of inputs are required in plantations?

Ans. Plantations use capital intensive inputs like large tracts of land.

28. In which season are rabi crops sown in India?

OR

Mention the sowing period of rabi crops.

Ans. Rabi crops are sown in winter from October to December.

29. Why should Indian farmers diversify their cropping pattern from cereals to high-value crops?

Ans. Indian farmers should diversity their cropping pattern from cereals to high-value crops because this will increase income and reduce environmental degradation simultaneously.

30. Name any two rabi crops.

Ans. Wheat, barley, peas, gram and mustard.

31. In states like Assam, three crops of paddy are grown in a year. Name any two such Jeneration School crops.

Ans. Aus, Aman and Boro.

32. What is 'Zaid'?

Ans. It is a season for short duration between the rabi and karif season.



33. Name any two Zaid crops.

Ans. Watermelon, muskmelon, cucumber, vegetables and fodder crops.

34. Name the second most important cereal crop grown in India.

Ans. Wheat.

35. Name the two important wheat growing zones in India.

Ans. The two wheat growing zones in India are

- (a) Ganga-Satluj plains in the north-west
- (b) Black soil region of the Deccan.

36. Name the crop which is used both as food and fodder.

Ans. Maize

37. In which type of soil does maize grow well?

Ans. Maize grows well in old alluvial soil.

38. Write the names of any two millets grown in India.

Ans. Jowar and bajra are the important millets grown in India.

39. Name the state which is the largest producer of ragi.

Ans. Kartnataka is the larges producer of ragi.

40. Name one rain-fed crop.

Ans. Jowan

41. Name any two Jowar producing states.

Ans. Maharastra, Karnataka, Andhra Pradesh, and Madhya Pradesh.

42. What type of soil is required for the growth of Bajra?

Ans. Bajra grows well on sand and shallow black soil.

43. Name two majir bajra producing states in India.

Ans. Rajasthan, Uttar Pradesh, Maharashtra, Gujarat and Harynana.

44. Name the crop in which India is the largest producer and consumer.

Ans. Pulses.

45. Name any two major pulses grown in India.

Ans. Major pulses growin in India are tur (arhar), urad, moong, masur, peas and gram.

46. Sugar is the main source of which products?



Ans. Gur. Khandsari and molasses.

47. What was the rank of India in rapeseed production in 2016?

Ans. India was the third largest producer in the world after Canada and China in 2016.

48. Name any two oilseeds produced in India.

Ans. Government, castor, seeds, cotton seeds, mustard, coconut, sesamum, linseed and sunflower. (any two)

49. Name the first and the second largest producers of groundnut in the world in 2016.

Ans. China is the largest producer of groundnut followed by India in 2016.

50. Name any two oilseed crops which are grown as a kharif crop in the north and rabi crop in the south.

Ans. Sesamum and castor seed.

51. Mention two beverage crops grown in India.

Ans. Tea and coffee are two important beverage crops grown in India.

52. Name the beverage crop introduced by the British in India.

Ans. Tea

53. Which variety of coffee is grown in India?

Ans. Arabica variety from Yemen is grown in India.

54. To which part of India is coffee cultivation confined?

Ans. Coffee cultivation is confined to the Nilgiri in Karnataka, Kerala and Tamil Nadu.

55. Name on Equatorial crop.

Ans. Rubber.

56. List any two items in which natural rubber is used.

Ans. Auto tyres and tubes, belts and hoses, foot wears, Latex foam, cycle tyres and tubes.

57. What is the rearing of silkworms called?

58. Name any one competitors of jute.

Ans. Nylon

59. Which term is used for grouping of small landholdings with bigger ones?



Ans. Consolidation of landholdings

60. Why is organic farming much in vogue in India today?

Ans. Organic farming is much in vogue in India today because it is practiced without factory made chemicals such as fertilizers and pesticides. Hence, it does not affect environment in a negative manner.

61. A few economists think that Indian farmers have a bleak future. Why?

Ans. A few economists thing that Indian farmers have a bleak future because land holdings are growing smaller and smaller as the population is rising. Subsistence level also cannot be achieved with very less landholdings.

62. What is White Revolution related to?

Ans. White Revolution is related to the production of milk. It is also called Operation Flood.

63. Name any two schemes introduced by the government to benefit farmers.

Ans. Kisan Credit Cards (KCC) and Personal Accident Insurance Scheme (PAIS).

64. What was the main aim of Bhoodan?

Ans. It main aim was to give land to the landless villagers.

65. Why is agriculture considered backbone of Indian economy? Give one reason.

Ans. Because it provides employment and livelihood. In 2010-11, about 52% of the total workforce was employed by the farm sector.

I. Short Answer Type Questions

(3 Marks each)

1. Describe any three main features of 'Rabi crop season':

Ans. Main features of 'Rabi Crop Season':

- (a) Rabi crops are sown in the winter season from October to December.
- (b) Harvested in summer from April to June.
- (c) Important Rabi crops are wheat, barley, peas, gram and mustard.
- (d) Availability of precipitation during winter months due to western temperate cyclones helps in the success of these crops.



- (e) Any other relevant point.
- 2. Describe any three main features of 'Kharif crop season.'

Ans. Features of 'Kharif Crop Season':

- (a) Grown with the onset of monsoon in different parts of the country.
- (b) Harvested in September-October.
- (c) Important Kharif crops are Paddy, Maize, Jowar, Bajra, Tur (arhar), etc.
- (d) Any other relevant point.
- 3. Which are the two main cropping seasons in India? Mention their growing and harvesting periods.
- 4. Why the pulses are mostly grown in rotation with other crops? Name any two major pulse producing states?

Ans. Cultivation of pulses requires following geographical conditions:

- (i) Pulses need less moisture and survive even in dry conditions.
- (ii) Being leguminous crops, all these crops help in restoring soil fertility by fixing nitrogen from the air.

Major pulses producing states in India are: Madhya Pradesh and Uttar Pradesh.

- 5. Describe the uses of oil seeds, which state is the largest producer of groundnut?

 Ans. (a) Oil seeds usually have two main uses:
- (i) They are used as a cooking medium as most of them are edible. For example, groundnut oil sunflower oil, coconut oil, etc.
- (ii) They are used as raw material. For example, oil seeds are important raw materials for the production of soap, cosmetics, ointments, etc.
- (b) Gujarat is the largest producer of groundnut in India. Other states are Rajasthan,
 Tamil Nadu, Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, West Bengal
 and Telangana.
- 6. Enlist the various agriculture institutional reform programmes introduced by the government in the interest of farmers.
 - 1. Green revolution (Package technology) and white revolution (operation flood) were set up by the government, but this led to development in concentrated areas.



- Farmers were given crop insurance against failure of crops in case of droughts, floods, fires, etc. Establishment of grameen banks, cooperatives and banks that provided loans at reasonable rates of interest.
- 3. Kisan Credit card, PAIS (Personal accident insurance scheme), enumerative prices, special weather bulletins, special programmes on TV and radio channels were also set up to reduce the exploitation by middle men and speculations.

OR

Various agricultural institutional reform programmes introduced by the government in interest of the farmers are:

- (i) Provision for crop insurance against drought, flood, cyclone, fire and diseases.
- (ii) Establishment of Grameen Banks, Cooperative Societies for providing loan facilities to farmers at lower interest rates.
- (iii) Minimum Support Price (MSP).
- (iv) Subsidy on Fertilisers.
- (v) Facilities of Kisan Credit Card and Personal Accident Insurance Scheme.
- 7. The land under cultivation has got reduced day by day. Can you imagine its consequences?
- Ans. (i) India shall no longer be self-sufficient in its requirements of food grains.
- (ii) Landless labourers will outweigh the ranks of unskilled unemployed workers in India.
- (iii) More farmers will switch over to the cultivation of high-value crops.
- 8. Suggest the initiative taken by the government to ensure the increase in agricultural production.

Ans.

- (i) Organic farming is much in vogue today because it is practiced without factor made chemicals such as fertilisers and pesticides. Hence, it does not negatively affect the environment.
- (ii) Indian farmers should diversify their cropping pattern from cereals to high-value crops. This will increase incomes and reduce environmental degradation simultaneously.
- (iii) Because fruits, medicinal herbs, flowers, vegetables, bio-diesel crops like jatropha and



jojoba need much less irrigation than rice or sugarcane. India's diverse climate can be harnessed to grow a wide range of high-value crops.

9. State any three characteristics of primitive subsistence farming.

Ans. Following are the characteristics of primitive subsistence farming:

- a) In this type of farming farmers grow crops for self-consumption. This type of farming is still practised in a few pockets of India.
- b) It is practised on small patches of land.
- c) Farmers use primitive tools like hoe, dao and digging sticks.
- d) Only family/ community/ labour is used for farming.
- e) This type of farming depends upon natural conditions such as monsoon, natural fertility of the soil and suitable conditions for the crops.
- f) It is also known as 'Slash and burn' agriculture.
- g) Land productivity in this type of agriculture is low as the farmers do not use fertilisers or others modern inputs.
- 10. What is 'slash and burn' agriculture? Explain its salient features.

Ans. Slash and burn agriculture is the other name for shifting agriculture. It is the most primitive farming type practised by the tribal people living in tropical regions. Salient features of this type if agriculture are:

- a) Forests are cleared and trees are burnt to make the land available for cultivation
- b) Primitive tools like hoe, dao and digging sticks are used for cultivation.
- c) This type of farming depends upon monsoon, natural fertility of soil and other environmental conditions.
- d) Productivity is very low as there is less use of natural fertilizers and pesticides, etc.
- 11. Mention different names by which slash and burn type of farming is known in India. Name the states where this type of farming is practiced in India. Name any two crops grown in thus type of farming.

Ans. It is knwon by different names in India like Jhmumming, Bewar, Podu etc.



- a) Jhumming in north-eastern states like Assam, Meghalaya, Mizoram and Nagaland;
- b) It is practiced in Chhattisgarh and Andaman and Nicobar Islands.
- c) In this type of farming mainly food grain crops are grown such as rice, maize and millets.

12. Explain any four features of intensive subsistence farming in India.

Ans. This type of farming is practised in areas of high density of population where pressure of population is high on agricultural land.

- a) It is labour-intensive farming.
- b) High doses of biochemical inputs and irrigation are used for obtaining higher production.
- c) Farm size is small and uneconomical due to the division of land.
- d) The farmers take maximum output from the limited land.
- e) Farmers do not have any alternative source of livelihood. Thus, there is enormous pressure on agricultural land.

13. State any three characteristics of commercial farming.

Ans. Commercial farming has following characteristics:

- a) Farmer use higher doses of modern inputs, e.g. high yielding variety *HYV) sees, chemical fertilisers, insecticides and pesticides.
- b) Farmers obtain higher productivity from land due to high doses of inputs.
- c) The degree of commercialisation of agriculture varies from one region to another.

 For example, rice is a commercial crop in Haryana and Punjab, but in Odisha, it is a subsistence crop.
- d) Plantation is also a type of commercial farming.





14. Compare primitive subsistence and commercial farming.

Primitive Subsistence Farming	Commercial Farming
a) Small patches of land are cultivated	a) Large tracts of land are brought
	under cultivation
b) Use of primitive tools like hoe, dao	b) Use of modern methods like tractors,
and digging sticks	and harvestors.
c) Depends on natural fertility of the	c) Uses chemical fertilisers,
soil and favourable environmental	insecticides and pesticides.
factors.	
d) Heavy dependence on monsoon.	d) Little or no dependence on monsoon.
e) Labour intensive with family members	
engaged in production.	e) Capital intensive due the use of HYV
	seeds, technology and migrant labour.

15. State the characteristics of plantation farming. Name any two plantation crops. Name any two states where plantation farming is practised.

Ans. Plantation farming is a type of commercial farming.

- a) In this type of farming, a single crop is grown on a large area.
- b) The plantation has an interface of agriculture and industry.
- c) Capital intensive inputs such as modern machinery are used with the help of migrant labourers.
- d) The production is mainly for market and all the produce is used as raw material in respective industries.
- e) It requires well- developed network of transport and communication to connect the plantation areas, processing plantation crops.

In India , tea, coffee. Rubber., sugarcane. Banana, etc. Are important plantation crops.

Plantation farming is practiced in Assam, West Bengal and Karnataka where crops like tea and coffee are grown.



OR

OR

16. Explain the features of three cropping seasons in India.

What are the three cropping seasons in India? Explain.

Describe any three main features of 'Rabi crop season'. OR

Describe any three main features of 'Kharif crop season'.

Ans. The three cropping seasons in India are rabi, kharif and zaid.

Rabi crops	Kharif crops	Zaid season
a) These crops are sown in winter from	a) These crops are grown with the	a) In between the rabi and the
October to December and harvested in	onset of monsoon and harvested in	khariff seasons, there is a short
summer from April to June	September- October.	season during the summer months
		known as the Zaid season.
b) Some of the important rabi crops are	b) Important crops grown during	b) Some of the crops produced
wheat barley, peas, gram and mustard.	this season are rice (paddy),	during zaid are watermelon,
	maize, jowar, bajra, tur (arhar),	muskmelon, cucumber, vegetables,
	moong, urad, cotton, jute,	fodder crops and sugar cane.
	groundnut and soyabean.	
c) Northern and north western states	c) Some of the most important	
such as Punjab, Haryana, Himachal	khariff regions are Assam, West	
Pradesh, Jammu and Kashmir,	Bengal, Coastal regions of Odisha,	
Uttaranchal and Uttar Pradesh are	the Konkan Coast, Uttar Pradesh	
important for the production of rabi	and Bihar.	
crops.		
d) Success of rabi crops depend on the		
availability of precipitation during winter		
months due to the western temperate		
cyclones.		
e) However, the success of the Green		
Revolution in Punjab, Haryana, western		
Uttar Pradesh and parts of Rajasthan		
has also been an important factor in the		
growth of the rabi crops.	· · · · ·	500

17. What are millets? Why are millets very important crops of India?

Ans. Millets are coarse grains like ragi, bajra and jowar. Millets are very important crops of India because of the following reasons:



- a) They are highly nutritious. Ragi is rich in iron, calcium and roughage.
- b) They can be grown in rain-fed areas and hardly need irrigation.
- 18. Name the crop used both as food and fodder. Mention the geographical conditions required for the growth if such crop.

Ans. Maize crop is used both as food and fodder Geographical conditions required for growing maize are:

- a) It is a khariff crop. It requires temperature between 21°C to 27°C.
- b) It grows well in old alluvial soil.
- 19. Name the pulses grown in India along with the geographical conditions required.

 Ans.
 - a) Pulses grown in India-arhar, urad, moong, masur, peas and gram.
 - b) They are the major source of protein in the vegetarian diet.
 - c) They require less moisture and survive even in dry conditions. Thus they are grown all over the country They are grown as in rotation crops since they help in restoring soil fertility.
- 20. Name some leguminous crops. Write whether they are rabi or kharif crops. What is their importance?

Ans. Some leguminous crops are urad, arhar, moong and peas. Arhar, urad and moong are kharif crops while peas is a rabi crop. Their importance is as follows:

- a) Pulses are an important source of protein in a vegetarian diet.
- b) Being leguminous crops. All these crops, except arhar, help in restoring soild fertility by fixing nitrogen from air. Therefore, they are grown in rotation with other crops.
- 21. What is the importance of pulses in our country? Why are pulses grown as rotation crop? Name two major pulse producing states of India.

Ans. India is the largest producer and consumer of pulses in the world. They are the main source if protein in a vegetarian diet. Pulse need less moisture and survive in dry climate. Pulses are leguminous crops and all the crops. Except arhar, help in restoring soil fertility by fixing nitrogen from the air. Since they make the soil fertile, they are grown in



rotation with other crops. Major pulses producing states in India are Maharashtra, Madhya Pradesh, Rajasthan, Uttar Pradesh.

- 22. Mention the geographical conditions required for the cultivation of sugar cane.

 Ans.
 - a) Sugar cane is a tropical as well as a subtropical crop.
 - b) It grows well in hot and humid climate
 - c) It requires a temperature of 21° c to 27° C with an annual rainfall between 75cm. And 100cm.
 - d) Irrigation is required in the regions of low rainfall.
 - e) It can be grown on a variety of soils-black alluvial, loamy & reddish loam.
- 23. Name some oilseeds produced in India. How are they used? Name two oilseeds which can be grown both as a rabi crop and kharif crop.

Ans. The oilseeds produced in India are groundnut, mustard, coconut, sesamum and sunflower.

Most of these oilseeds are edible and used as a cooking medium, Some of these are also used as raw materials for making soap, cosmetics and ointments. Sesamum and castor seed is gown both as rabi and kharif crop.

24. Name the important beverage crop introduced by the British in India. Explain the geographical conditions needed for its cultivation. Write two important states where it is grown.

Ans. Tea was introduced by the British in India. It is a beverage crop.

- a) The tea plant grows well in tropical and subtropical conditions, with deep and fertile well-drained soil, rich in humus and organic matter.
- b) Tea bushes require warm, moist and frost-free climate all through the year.
- c) Frequent showers, evenly distributed over the year, ensure continuous growth of tender leaves.
- d) Major tea producing states are Assam and West Bengal (hills of Darjeeling and Jalpaiguri districts).



25. Write a short note on coffee cultivation in India.

Ans. Indian coffee is known in the world for its good quality. The Arabica variety brought from Yemen is produced in the country. Intially its cultivation was introduced on the Baba Budan Hills. Even today its cultivation is confined to the Nilgiri in Karnataka, Kerala and Tamil Nadu.

26. Mention the geographical condition required for the cultivation of rubber. Name the areas where it is grown.

Ans.

- a) Rubber is an equatorial crop, but under special conditions, it is also grown in tropical and sub-tropical areas.
- b) It require moist and humid climate with rainfall of more than 200 cm.
- c) Temperature above 25°C is excellent for this crops.

It is mainly grown in Kerala, Tamil Nadu, Karnataka and Andaman and Nicobar islands and Garo hills of Meghalaya.

27. Why do you think Kerala is the largest producer of rubber in India? State the rank of India in world in the natural rubber production in 2012-13.

Ans. Kerala lies in the tropical region and has ideal geographical and climatic conditions for growing rubber. The climate conditions required for growing rubber are moist and humid climate, with rainfall of more than 200 cm and temperature above $25^{\circ}C$. It is an equatorial crop best suited for Kerala.

28. Give a brief account of cotton production in India.

Ans. India is believed to be the original home of the cotton plant. Cotton is one of the main raw materials for cotton textile industry. In 2016 India was the second largest producer of cotton after china. In India, it grows well in drier parts of the black cotton soil of the Deccan plateau. Major cotton-producing states are - Maharashtra, Gurjarat, Madhya Pradesh, Karnataka, Andhra Pradesh, Telangana, Tamil Nadu, Punjab, Haryana and Uttar Pradesh.

29. Mention the Physical conditions for the growth of golden fibre. Name the major jute producing states in India.



Ans.

- a) It is known as the golden fibre.
- b) Jute grows well on well-drained fertile soils in the flood plains where soils are renewed every year.
- c) High temperature is required during the time of growth.

Wese Bengal, Bihar, Assam, Odisha and Meghalaya are the major jute producing states. It is used in making gunny bags, mats, ropes, yarn, carpets and other artefacts.

30. What are the challenges faced by jute in India?

Ans

- i. The major challenge faced by jute is the expanding market of synthetic fibre.
- ii. It is cheap and is being used for variety of purpose like packaging or making carpets etc.
- iii. On the other hand, jute is very expensive.
- 31. Why does the government announce minimum support price, remunerative and procurement prices for important crops?

Ans. The government announces the minimum support price and procurement price to save the farmers from exploitation by speculators and middlemen.

Procurement price is the price at which the government actually buys the produce from the farmers.

At the beginning of the growing season, the government announces the minimum support price and if the farmers do not get that price from the middlemen, the produce is purchased by the government.

32. 'Agriculture is the mainstay of the Indian economy.' Explain the statement by giving three points.

Ans. Agriculture is the mainstay of the Indian economy because:

- a) More than half of the population is dependent on agriculture for sustenance.
- b) It generates large scale employment. In 2010-11 about 52% of total work force was employed by the farm sector.
- c) It provides food for teeming millions.



- d) It provides raw materials to many agro-based industries like cotton, rubber, sugar.
- e) Export of agricultural produces like tea and spices earns valuable foreign exchange.
- 33. Highlight the geographical condition for the growth of rice in India along with major rice growing states.

Ans. Rice is the Staple food crop in India. The geographical conditions required for the growth of rice are:

- a) It requires high temperature (above 250C) and high humidity as it is a khari crop.
- b) Rainfall above 100 cm
- c) Efficient irrigation in areas of less rainfall.
- d) It proves well in fertile alluvial loamy and clayey soil.

Major rice growing areas in India are plains of north and north east, coastal and deltaic regions and tubewells. Rice grows well in areas of less rainfall like Punjab, Haryana, Uttar Pradesh and parts of Rajasthan with the help of canal irrigation.

34. Mention the geographical requirements for the growth of wheat in India. Mention two wheat growing zones.

Ans. Wheat is the second most important cereal crop. It is the main food crop in north and north-western parts of India. It is a rabi crop. Geographical condition for the growth of wheat are:

- a) It requires a cool growing season.
- b) Bright sunshine at the time of ripening.
- c) It requires 50 to 75 cm of annual rainfall.
- d) The rainfall should be evenly distributed over the growing season.

The two important wheat growing zones in the country are:

- a) The Ganga-Sutluj plains in the north-west.
- b) Black soil region of the Deccan.
- 35. Mention the major crops that come under millets. State the geographical conditions required for their cultivation along with the areas where they are grown.

Ans. Jowar, bajra and ragi are the important millets grown in India. These are known as coarse grains. They have very high nutritional value.



Ragi is very rich in iron, calcium, other micronutrients and roughage.

- i. a) Jowar is the third most important food crop with respect to area and production.
 - b) It is a rian-fed crop mostly grown in the moist areas which hardly need irrigation.
 - c) Maharashtra is the largest producer of jowar followed by Karnataka, Andhra Pradesh and Madhya Pradesh.
- ii. a) Bajra grows well on sandy soils and shallow black soil.
 - b) Rajasthan is the largest producer of bajra followed by Uttar Pradesh,
 Maharashtra, Gujarat and Haryana.
- iii. a) Ragi is crop of dry regions and grows well on red, black, sandy, loamy and shallow black soils.
 - b) Major ragi producing states are -Karnataka, Tamil Nadu, Himachal Pradesh, Uttaranchal, Sikkim, Jharkhand and Arunachal Pradesh.

36. Write a note on horticulture crops grown in India.

Ans. Horticulture crops include fruits and vegetables. In 2016 India was the second largest producer of fruits and vegetables in the world after China. India produces tropical as well as temperate fruits as under:

- a) Mangoes in Maharashtra, Andhra Pradesh, Telangana, Uttar Pradesh, and West Bengal.
- b) Oranges in Nagpur and Cherrapunjee (Meghayalaya).
- c) Bananas from Kerala, Mizoram, Maharashtra and Tamil Nadu are world famous.
- d) Lichi and guava in Uttar Pradesh and Bihar.
- e) Pineapples in Meghalaya.
- f) Grapes in Andhra Pradesh, Telangana and Maharashtra.
- g) Apples, pears, apricots and walnuts of Jammu and Kashmir and Himachal Pradesh are in great demand the world over.

37. Why is agriculture called the backbone of Indian economy? Explain.

Ans. Agriculture has been the backbone of the Indian economy.

a) Its share in providing employment and livelihood to the population continues to be high.



- b) India is an agriculturally important country and two thirds of its population is engaged in agricultural activities.
- c) Agriculture is a primary activity, which produces most of the food that we consume.
- d) Besides food grains, it also produces raw materials for various industries.
- e) Moreover, some agricultural produces like tea, coffee, spices, etc. Are also exported.
- f) All other sectors of Indian economy heavily depend on agriculture for their growth.

38. Explain any five features of plantation farming.

Ans. Plantation is a type of commercial farming where a single crop is grown on a large area. The following are the four characteristics of plantation.

- a) Plantations have very large areas.
- b) Capital-intensive inputs are used.
- c) Migrant labourers are used.
- d) All the produce is used as raw material in respective industries.
- e) The development of plantations is the result of a well-developed network of transport and communication, connecting plantations to markets.

I. Long Answer Type Questions

(5 Marks each)

1. Why is agriculture called the backbone of Indian economy? Explain.

Ans. Agriculture is the backbone of the Indian economy because:

- (i) In India, about 52% of people were engaged in the agriculture sector in 2010-2011.
- (ii) It provides raw materials to industries.
- (iii) It helps earn foreign exchange for the country through the export of agricultural produce.
- (iv) The agricultural sector contributes almost one third of our GDP.
- (v) The sector also provides food for our teeming population.
- 2. Explain any five features of plantation farming.
- 3. Explain any four features of primitive subsistence agriculture in India.



- (i) It is practiced on small patches of land
- (ii) Tools used in this kind of farming are traditional tools such as hoe, dao and digging stick.
- (iii) This type of agriculture is completely dependent on monsoon.
- (iv) When soil fertility decreases, the farmers shift to another plot of land.
- (v) Only a few crops are raised. The main crops grown are maize or corn, cassava or manioc, millet, and beans.

Detailed Answer:

- (i) This type of farming is practised on small patches of land with the help of primitive tools like hoe, dao and digging sticks and family labour.
- (ii) This type of farming depends upon monsoons, natural fertility of soil and environmental suitability.
- (iii) It is a `slash and burn' agriculture. Farmers clear a patch of land and produce crops for their sustenance.
- (iv) When the soil fertility decreases, farmers shift to new area, clear forest by burning and again sow crops.
- (v) This type of agriculture is self-sufficient and farmers only grow food for themselves and their families.
- 4. Name the two major beverage crops grown in India. Describe their growing areas.

Ans. Two major beverage crops: Tea and coffee.

Tea growing areas: Assam, West Bengal, Tamil Nadu and Kerala.

Coffee producing states: Karnataka, Kerala and Tamil Nadu.

Detailed Answer:

Tea and coffee are the two major beverage crops grown in India.

(a) Tea:

- (i) An example of plantation agriculture is an important beverage crop introduced in India by the British.
- (ii) Grows well in tropical and sub-tropical climates endowed with deep and fertile



- well- drained soil, rich in humus and organic matter.
- (iii) Requires warm and moist frost-free climate, frequent showers evenly distributed over the year.
- (iv) A labour-intensive industry, requires abundant cheap and skilled labour.
- (v) Major producing states are Assam, West Bengal, Tamil Nadu and Kerala. Apart from these, Himachal Pradesh, Uttarakhand, Meghalaya, Andhra Pradesh and Tripura are also tea-producing states in the country.
- (vi) India is the leading producer as well as exporter of tea in the world.

(b) Coffee:

- (i) India produces about four per cent of the world's total coffee.
- (ii) The Arabica variety produced in the country is in great demand all over the world.
- (iii) It is mainly cultivated in Karnataka, Kerala and Tamil Nadu.
- 5. Mention the geographical conditions required for the growth of cotton along with anyu four cotton producing states.

Ans. Geographical conditions required for the growth of cotton are:

- a) Cotton grows well in the drier parts of the black cotton soil of the Deccan plateau.
- b) It requires high temperature, light rainfall or irrigation, 2010-frost-free days and bright sunshine for its growth.
- c) It is a kharif crop and requires 6 to 8 months to mature.

Major cotton producing states are Maharashtra, Gujarat, Madhya Pradesh, Karnataka, Andhra Pradesh, Telangana, Tamil Nadu, Punjab, Haryana and Uttar Pradesh.

6. Describe the conditions which led to technological and institutional reforms in the agricultural sector in India.

Ans.

- a) Agriculture has been in practiced in India for thousands of years.
- b) Continued uses of land without well-matched techno-institutional reforms lead to slow down of the pace of agricultural development.



- c) In spite fo development in irrigation most of the farmers in large parts of the country still depend upon monsoon and natural fertility of soil.
- d) Our population grew at faster rate that agriculture production.
- e) More than half of India's population depends on agriculture.
- 7. Explain any five features of comprehensive land development programme initiated during the 1980s and the 1990s.

OR

Describe any five technological and institutional reforms initiated to improve the standard of agriculture in India.

OR

Describe any four institutional reforms introduced by the government of India in the interest of the farmers.

Ans. The comprehensive land development programme included both institutional and technical reforms. Following reforms were introduced.

- a) Provision for crop insurance against drought, flood cyclone, fire and disease.
- b) Establishment of Grameen Banks, cooperative societies and banks for providing loan facilities to the farmers at lower rates of interest were some of the important steps in this direction.
- c) Kissan Credit Card (KCC) was introduced for easy availability of inputs.
- d) Personal Accident Insurance Scheme (PAIS) was introduced by the Government of India for the benefit of the farmers.
- e) Special weather bulletins and agricultural programmes for farmers were introduced on the radio and television.
- f) The government also announced minimum support price, remunerative and procurement prices for important crops to check the exploitation of farmers by speculators and middlemen.
- 8. Describe the contribution of agriculture to the national economy.

Ans. Agriculture has been the backbone of the Indian economy.



- a) Its share in providing employment and livelihood to the population continues to be high.
- b) India is an agriculturally important country. In 2010-11, about 52% of total workforce was employed by the farm sector.
- c) Agriculture is a primary activity, which produces most of the food that we consume.
- d) Besides food grains, it also produces raw materials for various industries.
- e) Moreover, some agricultural produces like tea, coffee, spices, etc., also exported.
- f) All other sectors of Indian economy heavily depend on agriculture for their growth.

9. What are the challenges faced by the farmers today?

Ans.

- a) Indian farmers are facing big challenge from international competition and reduction in public investment in agricultural sector especially in irrigation, power infrastructure and other inputs.
- b) Subsidy on fertilizers has been decreased leading to higher cost of production.
- c) Reduction in import duties on agriculture products.
- d) Farmers are withdrawing their investment from agriculture, resulting in lack of alternative employment opportunities.
- e) Erratic nature of monsoons affects agriculture production on a large scale.
- 10. Name any two major fibre crops grown in India. Describe the conditions required to grow these two crops.

Ans. Two fibre crops - cotton and jute.

Cotton: Black soil, high temperatur<mark>e,</mark> light rainfall, clea<mark>r</mark> sky

Jute: Well-drained fertile soil, high temperature

Detailed Answer:

Cotton:

- (i) Cotton grows well in drier parts of the black cotton soil of the Deccan Plateau.
- (ii) It requires high temperature, light rainfall or irrigation.
- (iii) It requires 210 frost-free days and bright sunshine for its growth.



(iv) It is a kharif crop and requires 6 to 8 months to mature.

Jute:

- (i) Jute grows well on well-drained fertile soils in the flood plains where soils are renewed every year.
- (ii) High temperature is required during the time of growth.
- 11. Name the two most important cereal crops grown in India. Describe the conditions

required to grow these two crops.

- Ans. The main cereal crops: Rice & Wheat Conditions for growing rice:
 - (i) High temperature above 25°C.
 - (ii) High humidity with annual rainfall above 100 cms
 - (iii) Important Kharif crop.

Conditions for growing wheat:

- (i) Rainfall 50-75 cms.
- (ii) Low temperature with bright sunshine.
- (iii) Important Rabi crop.

Detailed Answer:

Rice and wheat are the two most important cereal crops grown in India.

- (i) Rice: This crop is grown well in hot and moist climate. The geographical conditions required for rice cultivation are:
- (a) Temperature: $16^{\circ}C 27^{\circ}C$ and rainfall 100 cm to 200 cm is ideal for rice growing. But rainfall during harvest time is harmful. Annual coverage temperature around $24^{\circ}C$ is ideal.
- (b) Soil: Rice is grown well on the alluvial soil or on the fertile river basins. It is also grown in mixed soil or loamy and clayey soil.
- (c) Land: Plain lands or gentle slopes are suitable for the production of rice. Because stagnancy of water is must for the cultivation of rice. Plenty of cheap labour is also required for the production of rice. HYV seeds, plenty of chemical manure, irrigation water, can produce more rice.
- (ii) Wheat: Wheat is the 2nd most important food crop of India. It is the crop of



temperate region. In India, it is grown in winter. It is more dependent on climate than soil.

The geographical conditions required for wheat cultivation are mentioned below:

- (a) Temperature: Wheat requires 14° to 18°C temperature. High temperature is harmful for the cultivation of wheat.
- (b) Rainfall: 50 cm to 100 cm rainfall is required for wheat cultivation. In the primary stage, cold moisture rich climate and at the time of harvesting, bright hot climate is required.
- (c) Soil: Fertile alluvial soil or mixed soil is ideal for wheat cultivation.
- (d) Land: Plain lands or gentle slopes are ideal for wheat cultivation. Plenty of labour along with fertilizer, irrigation facilities, HYV seeds like Heera, Moti, RR-8 Kalyan, etc. and mechanized farming are good for wheat production. Uttar Pradesh is the largest producer of wheat followed by Punjab, Haryana, Madhya Pradesh, Tamil Nadu and Bihar.
- 12. Establish the difference between commercial farming and subsistence farming with

the help of a suitable example.

OR

Distinguish between primitive subsistence farming by stating five points of distinction.

Ans. A. Commercial Farming

- (i) It is distinguished by use of higher doses of modern inputs like High Yielding Variety (HYV) seeds, fertilizers, farming tools, etc.
- (ii) Commercialization of agriculture varies from region to region.
- (iii) It is characterized by a use of well-developed network of transport and communication.
- (iv) Plantation is a type of commercial farming.
- (v) High productivity is the first and the foremost aim of commercial farming.
- (vi) For example, Rice is a commercial crop in Haryana and Punjab.

B. Subsistence Farming

- (i) This type of farming is practiced on small patches of land.
- (ii) Labour- intensive farming.



- (iii) It is characterized by the use of primitive tools.
- (iv) This type of farming is entirely dependent on monsoons.
- (v) 'Slash and burn' agriculture is a type of primitive farming.
- (vi) Productivity in this type of farming is very low.
- (vii) For example, rice is a subsistence crop in Odisha.
- 13. Compare 'intensive subsistence farming' with that of 'commercial farming' practiced in India.

Ans. Comparison between 'Intensive Subsistence farming' and 'Commercial farming':

- (i) In intensive subsistence farming, pressure of population on land is high whereas in commercial farming population pressure is low
- (ii) In intensive subsistence farming, labour intensive farming is used whereas in commercial farming mechanized form of farming is used.
- (iii) In intensive subsistence farming, there is low capital investment whereas in commercial farming high capital investment is required
- (iv) In intensive subsistence farming, farmers produce for their own consumption whereas in commercial farming production is solely for the commercial purpose.
- (v) In intensive subsistence farming, processing industries are not associated with farms whereas in commercial farming processing industries are associated with plantations
- (vi) In intensive subsistence farming, multiple crops are grown whereas in commercial farming a single crop is grown.
- (vii) In intensive subsistence farming, land holdings are small whereas in commercial farming land holdings are large.
- (viii) Any other relevant point.
- 14. Explain any two main challenges faced by the jute industry in India. Explain any three objectives of National Jute Policy.

Ans. Challenges faced by the jute industry:

- (a) Stiff competition in the international market from synthetic substitutes.
- (b) To stimulate demand the products need to be diversified.
- (c) Stiff competition from other competitors like Bangladesh, Brazil etc.



Any other relevant point. (Any two points to be explained.)

Objective of National Jute Policy:

- (a)Increasing productivity
- (b) Improving quality.
- (c) Ensuring good prices to the jute farmers.
- (d) Enhancing the yield per hectare.
- (e) Any other relevant points

Detailed Answer:

Following are the challenges faced by the jute industries in India:

- (i) Prices for jute textiles are so low that industrialists hesitate to set up these industries.
- (ii) International demand of jute goods is falling sharply which is not an encouragement for these industries.
- (iii) Many countries now prefer substitutes for jute like plastic or synthetic fibres which reduces its demand.
- (iv) Our jute industries face hard competition from Brazil, Thailand, Bangladesh and Egypt whose production cost of jute textile is much lower than of India.
- (v) As jute exhausts soil fertility very fast and also because of its low profits, farmers now prefer to cultivate alternative crops like rice.
- (vi) The government has taken the following steps to boost Jute production:
- (vii) The government has made it compulsory in the country to use jute packaging.
- (viii) In 2005, our government form<mark>ul</mark>ated the National Jute policy with the following aims:
 - (a) To expand production
 - (b) To enhance quality
 - (c) To provide good prices to the farmers
 - (d) To enhance yield per hectare
- (ix) With the increased awareness about environmental degradation, many state governments have also banned the use of plastic bags and recommended jute or paper bags.



15. "The Government of India has introduced various institutional and technological reforms to improve agriculture in the 1980s and 1990s." Support this statement with examples.
OR

Explain any five institutional and technical reforms brought by the government to improve the condition of Indian agriculture.

OR

Describe any five steps taken by the government of India to increase the productivity of agriculture in India.

Ans:

Institutional and technological reforms undertaken by the Government of India to improve agriculture in the 1980s and 1990s were:

- a. Institutional Reforms:
- (i) A Comprehensive Land Development Programme was initiated.
- (ii) Provision of crop insurance against drought, floods, cyclone, fire and disease was introduced.
- (iii) Gramin Banks, Cooperative Societies and Banks were established for providing loan facilities to the farmers at lower rates of interest.
- (iv) Kisan Credit Card (KCC) was introduced.
- (v) Personal Accident Insurance Scheme (PAIS) was introduced.
- (vi) The government announced Minimum Support Price, remunerative and procurement prices to reduce exploitation.
- b. Technological Reforms:
- (i) HYV seeds, chemical fertilizer and pesticides were provided.
- (ii) Methods of irrigation were modernized.
- (iii) Latest agricultural equipments were introduced.
- (iv)Special weather bulletins and agricultural programmes for farmers were introduced on radio and television.
- (v) Any other relevant point.
- 16. "The declining share of agriculture in the Gross Domestic Product (GDP) is a matter of serious concern in India." Support the statement.



Ans.

Agriculture has been the backbone of the Indian economy though its share in the Gross Domestic Product has registered a declining trend (from 1951 onwards). In 2010 - 11, about 52% of the total workforce was employed by the farm sector which makes more than half of the Indian population dependent on agriculture for sustenance.

The declining share of agriculture in the GDP is a matter of serious concern because any decline and stagnation in agriculture will lead to a decline in other spheres of the economy having wider implications for society. Considering the importance of agriculture in India, the Government of India made concerted efforts to modernize the agriculture.

17. Mention the geographical condition required for the growth of cotton along with any four cotton producing states.

Ans. Geographical condition required for the growth of cotton are:

- a) Cotton grows well in the drier parts of the black cotton soil of the Deccan plateau.
- b) It requires high temperature, light rainfall or irrigation, 210-frost-free days and bright sun-shine for its growth.
- c) It is a khariff crop and requires 6 to 8 months to mature.

Major cotton producing states are Maharashtra, Gujarat, Madhya Pradesh, Karnataka, Andhra Pradesh, Telangana, Tamil Nadu, Punjab, Haryana and Uttar Pradesh.

18. Describe the conditions which led to technological and institutional reforms in the agricultural sector in India.

Ans.

- a) Agriculture has been in practiced in India for thousands of years.
- b) Continued uses of land without well-matched techno-institutional reforms lead to slow down of the pace of agricultural development.
- c) In spite of development in irrigation most of the farmers in large parts of the country still depend upon monsoon and natural fertility of soil.
- d) Our population grew at faster rate than agriculture production.
- e) More than half of India's population depends on agriculture.



19. Explain any five features of comprehensive land development programme initiated during the 1980sand the 1990s.

Or

Describe any five technological and institutional reforms initiated to improve the standard of agriculture in India.

Or

Describe any four institutional reforms introduced by the government of India in the interest of the farmers.

Ans. The comprehensive land development programme included both institutional and technical reforms. Following reforms were introduced.

- a) Provision for crop insurance against drought, flood, cyclone, fire and disease.
- b) Establishment of Grameen Banks, cooperative societies and banks for providing loan facilities to the farmers at lower rates of interest were some of the important steps in this direction.
- c) Kissan Credit card (KCC) was introduced for easy availability of inputs.
- d) Personal Accident Insurance Scheme (PAIS) was introduced by the Government of India for the benefit of the farmers.
- e) Special weather bulletins and agricultural programmes for farmers were introduced on the ratio and television.
- f) The government also announced minimum support price, remunerative and procurement prices for important crops to check the exploitation of farmers by speculators and middlemen.
- 20. Describe the contribution of agriculture to the national economy.

Ans. Agriculture has been the backbone of the Indian economy.

- a) Its share in providing employment and livelihood to the population continues to be high.
- b) India is an agriculturally important country. In 2010-11, about 52% of total workforce was employed by the farm sector.
- c) Agriculture is a primary activity, which produces most of the food that we consume.



- d) Besides food grains, it also produces raw materials for various industries.
- e) Moreover, some agricultural produces like tea, coffee, spices, etc. are also exported.
- f) All other sectors of Indian economy heavily depend on agriculture for their growth.

21. What are the challenges faced by the farmers today? Ans

- a) Indian farmers are facing a big challenge from International competition and reduction in public investment in agricultural sector especially in irrigation, power infrastructure and other inputs.
- b) Subsidy on fertilizers has been decreased leading to higher cost of production.
- c) Reduction in import duties on agriculture products.
- d) Farmers are withdrawing their investment from agriculture, resulting in lack of alternative employment opportunities.
- e) Erratic nature of monsoons affects agriculture production on a large scale.

Case based MCQs

(4 Marks each)

Attempt any 4 sub-parts from each question. Each sub-part carries 1 mark.

I. Read the extract given below and answer any Five out of the six questions: Primitive Subsistence Farming

This type of farming is still practised in few pockets of India. Primitive Subsistence Agriculture is practised on small patches of land with the help of primitive tools like hoe, dao and digging sticks, and family/community labour. This type of farming depends upon monsoon, natural fertility of the soil and suitability of other environmental conditions to the crops grown.

It is a 'slash and burn' agriculture. Farmers clear a patch of land and produce cereals and other food crops to sustain their family. When the soil fertility decreases, the farmers shift and clear a fresh patch of land for cultivation. This type of shifting allows



nature to replenish the fertility of the soil through natural processes; land productivity in this type of agriculture is low as the farmer does not use fertilisers or other modern inputs. It is known by different names in different parts of the country.

Commercial Farming

Plantation is also a type of commercial farming. In this type of farming, a single crop is grown on a large area. The plantation has an interface of agriculture and industry.

Plantations cover large tracts of land, using capital intensive inputs, with the help of migrant labourers. All the produce is used as raw material in respective industries.

In India, tea, coffee, rubber, sugarcane, banana, etc., are important plantation crops. Tea in Assam and North Bengal coffee in Karnataka are some of the important plantation crops grown in these states. Since the production is mainly for market, a well-developed network of transport and communication connecting the plantation areas, processing industries and markets plays an important role in the development of plantations.

markets plays an important role in the	development of plantations.
1. Primitive Subsistence farming dep	ends on:
(A) monsoon.	(B) fertility of soil.
(C) environmental conditions.	(D) All of the above
2. When the decrea	ses, the farmers clear a fresh patch of land fo
cultivation.	
(A) Production	(B) soil fertility
(C) natural calamities	(D) Industries
3 crop is grown in commercial	farming.
Zaid (B) Rabi	(C) Single (D) Kharif
4. In commercial farming, we use:	
(A) HYV seeds	(B) <mark>old</mark> methods of inputs
(C) small patches of land	(D) skilled labour.
5. What are the main requirements in	the development of plantations?
(A) Single crop Specialisation	(B) Good transportation system
(C) Cheap labour	(D) All of the above

II. Read the extract given below and answer any five out of the six questions:



Wheat

This is the second most important cereal crop. It is the main food crop, in north and north-western part of the country. This rabi crop requires a cool growing season and a bright sunshine at the time of ripening. It requires 50 to 75 cm of annual rainfall evenly-distributed over the growing season. There are two important wheat-growing zones in the country – the Ganga-Satluj plains in the northwest and black soil region of the Deccan. The major wheat-producing states are Punjab, Haryana, Uttar Pradesh, Bihar, Rajasthan and parts of Madhya Pradesh.

Rice

It is the staple food crop of a majority of the people in India. Our country is the second largest producer of rice in the world after China. It is a kharif crop which requires high temperature, (above $25^{\circ}C$) and high humidity with annual rainfall above 100 cm. In the areas of less rainfall, it grows with the help of irrigation.

 How much annua 	l rainfall is	required 1	or Wheat?
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(A) 50 to 75 cm

(B) below 50 cm

(C) Above 100 cm

(D) 75 to 150 cm

2. What is climatic conditions required for Rice?

(A) High rainfall

(B) High temperature

(C) High humidity

(D) All of the above

3. Identify the Wheat growing zones in India.

- (A) The Ganga-Satluj plains in the north-west
- (B) Black soil region of the Deccan plateau
- (C) Both 'a' and 'b'
- (D) None of the above

4. _____ is the largest producer of Rice

- (A) Brazil
- (B) India
- (C) China
- (D) Australia

5. Rice is a _____ crop.

- (A) Food
- (B) plantation
- (C) horticulture
- (D) Both B & C



6. Identify major difference between wheat crop and rice crop.

- (A) Wheat is grown mostly in south India; Rice is grown mostly in north India.
- (B) Rice is a Kharif crop; wheat is a rabi crop.
- (C) Rice is called grain crop, wheat is called cereal crop.
- (D) Both A & C

Case based Subjective Questions

II. Read the extract given below and answer any five out of the six questions:

Tea cultivation is an example of plantation agriculture. It is also an important beverage crop introduced in India initially by the British. Today, most of the tea plantations are owned by Indians. The tea plant grows well in tropical and sub-tropical climates endowed with deep and fertile well-drained soil, rich in humus and organic matter. Tea bushes require warm and moist frostfree climate all through the year. Frequent showers evenly distributed over the year ensure continuous growth of tender leaves. Tea is a labour-intensive industry. It requires abundant, cheap and skilled labour. Tea is processed within the tea garden to restore its freshness. Major tea producing states are Assam, hills of Darjeeling and Jalpaiguri districts, West Bengal, Tamil Nadu and Kerala. Apart from these, Himachal Pradesh, Uttarakhand, Meghalaya, Andhra Pradesh and Tripura are also tea-producing states in the country. In 2015 India was the second largest producer of tea after China.

1. Who introduced tea cultivation in India?

Ans. The Tea crop was introduced in India initially by the British.

2. Which type of climate is best from growing tea plant?

Ans. The tea plant grows well in tropical and subtropical climates endowed with deep and fertile well-drained soil, rich in humus and organic matter. Tea bushes require warm and moist frost free climate all through the year. Frequent showers evenly distributed over the year ensure continuous growth of tender leaves.

3. Why is tea a labour- intensive industry?

Ans. Tea is a labour intensive crop and requires abundant supply of cheap and skilled



labour, especially at the time of plucking the tea leaves. This is a tedious process which requires skilled manipulation of fingers for plucking two leaves and a bud at a time.

4. Name the major tea producing states of India.

Ans. Major tea producing states are Assam, hills of Darjeeling and Jalpaiguri districts, West Bengal, Tamil Nadu and Kerala. Apart from these, Himachal Pradesh, Uttarakhand, Meghalaya, Andhra Pradesh and Tripura are also tea-producing states in the country.

5. Why is tea processed within the tea garden?

Ans. Tea is processed within the tea garden to restore its freshness.

6. Which state ranks first in tea production in India?

Ans. Assam ranks first in tea production in India.

IV. Read the extract given below and answer any 5 out of 6 the questions:

Jhumming: The 'slash and burn' agriculture is known as 'Milpa' in Mexico and Central America, 'Conuco' in Venezuela, 'Roca' in Brazil, 'Masole' in Central Africa, 'Ladang' in Indonesia, 'Ray' in Vietnam.

In India, this primitive form of cultivation is called 'Bewar' or 'Dahiya' in Madhya Pradesh, 'Podu' or 'Penda' in Andhra Pradesh, 'Pama Dabi' or 'Koman' or 'Bringa' in Odisha, 'Kumari' in Western Ghats, 'Valre' or 'Waltre' in South-eastern Rajasthan, 'Khil' in the Himalayan belt, 'Kuruwa' in Jharkhand and 'Jhumming' in the North-eastern region.

- 1. How is Primitive Subsistence Agriculture related with Jhumming?
 - (A) It is based on shifting cultivation
 - (B) It is intensive in nature
 - (C) It is based on plantation cultivation
 - (D) It depends upon cash crop
- 2. The 'slash and burn' agriculture is known as 'Conuco' in which one of the following countries?

(A) Venezula

(B) Brazil

(C) Indonesia

D) Mexico

3. The 'slash and burn' agriculture is known as 'Roca' in which one of the following countries?



						That Transfer Polant	
	(A) Mexico (B) Indone	esia		(C) Brazil	(D)	Venezuela	
4. Identify the major problem of Jhumming cultivation.							
	(A) Single crop dominance			(B) Modern	n inputs		
	(C) High cost			(D) Low pr	oduction		
5. I	n India 'slash and burn' agric	ıltur	e is known	as 'Bewar	', in which o	of the following	
5	states?						
	(A) Andhra Pradesh		(B) M	adhya Prac	lesh		
	(C) Rajasthan		(D) Jł	narkhand			
6. /	Match Column I with Column II	and	d choose th	ne correct	option:		
	Column I		C	olumn II	/		
	I. Andhra Pradesh	A	. Kuruwa		0		
	II. Odisha	B.	Valre				
	III. Rajasthan	C.	Penda	70	-		
	IV. Jharkhand	D	. P <mark>ama</mark> Dabi				
	(A) I-C, II-D, III-B, IV-A (B) I-A, II-B, III-C, IV-D						
	(C) I-B, II-A, III-D, IV-C			(D) I-D, II	C-C, III-A, I	V-B	
۷. ا	Read the passage below and an	swe	r the follow	wing questi	ons:		
Agr	iculture has been the backbone	of tl	ne Indian e	conomy tho	ugh its share	in the Gross	
Domestic Product (GDP) has registered a declining trend from 1951 onwards; in 2010-11							
about 52 per cent of the total workforce was employed by the farm sector which makes							
more than half of the Indian Population dependent on agriculture for sustenance.							
i. What is the growth rate of agriculture in 2015-16?							
	a. 7.3% b. 9.2%		c. 1.1	1%	d. 4.5%		
ii. Which of the following sectors of the Indian economy has decelerating growth							
rate since 1951?							
a. Agriculture b. Industry c. Services d. Mining							
iii. What is the result of the farmers being withdrawing their investment from							
agriculture?							

a. Incrase in the employment in agriculture



- b. Downfall in the employment in agriculture in the GDP
- c. Increase in the share if agriculture in the GDP
- d. GDP growth rate becomes constant
- iv. Why is the declining share of agriculture in the GDP is a matter of serious concern?
 - a. Because it will lead to a decline in other spheres of the economy having wider implications for society.
 - b. Because it will lead to a decline in the employment in manufacturing sector.
 - c. Because it will lead to a decline in the income of the service sector.
 - f. All of the above.

VI. Read the passage below and answer the following questions:

Agriculture is an age-old economic activity in our COUNTRY. Over these years, cultivation methods have changed significantly depending upon the characteristics of physical environment, technological know-how and socio -cultural practices. Farming varies from subsistence to commercial type.

- a. Which of the following is a characteristic of primitive subsistence farming?
 - i. Practices on small patches of land
 - ii. Use of tools like hoe, dao and digging sticks, and family/community labour
 - iii. Depends upon monsoon, natural fertility of the soil and suitability to the crops grown.
 - iv. all of the above
- b. Which of the following is an important feature of Commercial Farming?
 - i. Is of higher doses of high yielding variety (HYV) seeds, chemical fertilisers, insecticides and pesticides in order to obtain higher productivity
 - ii. Farmers clear a patch of land and produce cereals and other food crops to sustain their family
 - iii. Allows nature to replenish the fertility of the soil through natural processes.
 - iv. All of the above.



- c. In which type of farming a single crop is grown on a large area, using capital intensive inputs, with the help of migrant labourers?
 - i. Intensive Subsistence Farming

ii. Jhumming

iii. Plantation

iv. Conuco farming

VII. Read the passage below and answer the following questions.

Though these crops are grown in large parts of India, states from the north and north-western parts such as Punjab, Haryana, Himachal Pradesh, Jammu and Kashmir, Uttarakhand and Uttar Pradesh are important for the production of wheat and other rabi crops. Availability of precipitation during winter months due to the western temperate cyclones helps in the success of these crops. However, the success of the green revolution in Punjab, Haryana, western Uttar Pradesh and parts of Rajasthan has also been an important factor in the growth of the above mentioned rabi crops.

Kharif crops are grown with the onset of monsoon in different parts of the country and these are harvested in September - October.

- a. In which one of the following seasons are the rabi crops sown?
 - i. Summer
- ii. Winter
- iii. Spring
- iv. Autumn
- b. In which months the rabi crops are harvested?
 - i. April to June

ii. October to December

iii. January to March

iv. July to September

- c. Which of the following are important rabi crops?
 - i. Wheat, barley, peas

ii. Cotton, jute, mustard

iii. Watermelon, muskmelon, gram

iv. Barley, gram, hemp

- d. Which one of the following crops is a kharif crop?
 - i. Paddy
- ii. Maize
- iii. Jowar
- iv. All of the above

VIII. Read the passage below and answer the following questions:

Primitive subsistence agriculture is practised on small patches of land with the help of primitive tools like hoe, dao and digging sticks, and family / community labour. This type of farming depends upon monsoon, natural fertility of the soil and suitablilty of other environmental condition to the crops grown.



- a. What is the other name of primitive subsistence farming?
- b. Why is it called so?
- c. What is it called in the Northern States of India?

Answer:

- a. The other name of primitive subsistence farming is 'slash & burn' cultivation.
- b. It is called 'Slash & burn' cultivation because in this type of agriculture farmers clear a patch of land and produce cereals and other food crops to sustain their family. When the soil fertility decreases, the farmers shift and clear a fresh patch or land for cultivation, hence, it is also called 'Shifting Cultivation'.

This type of shifting allows nature to replenish the fertility of the soil through natural processes. Land productivity in this type of agriculture is low as the farmer does not use fertilisers or other modern inputs. It is also known as 'Jhumming' in North-Eastern parts of India.

c. Jhumming

