

Class 10 – Agriculture (Code 029)

Answer Key / Marking Scheme

Maximum Marks: 60

Section A – Objective Type Questions (15 Marks)

Multiple Choice Questions (1 Mark Each)

1. Rice
2. Saving water
3. M.B. Plough
4. Rabi fodder crop
5. Dryland farming
6. Potato

Fill in the Blanks (1 Mark Each)

7. Rice
8. Micro (Pressure)
9. Subsistence

One Word Answer (1 Mark Each)

10. Moong / Arhar
11. Seed-cum-fertilizer drill
12. Drip irrigation / Sprinkler irrigation

Assertion–Reason (1 Mark Each)

13. Both A and R are true and R is the correct explanation of A.
14. Both A and R are true and R is the correct explanation of A.
15. Assertion is true but Reason is false.

Section B – Very Short Answer Questions (2 Marks Each)

16. Define Kharif crops.

Answer:

Kharif crops are crops sown during the rainy season (June–July) and harvested in autumn.
Examples: Rice, Maize, Bajra, Cotton.

17. Write any two characteristics of dryland farming.

Answer:

1. Depends mainly on rainfall.
 2. Practiced in areas with low rainfall.
 3. Moisture conservation is essential.
- (Any two)

18. Mention two advantages of sprinkler irrigation.

Answer:

1. Saves water.
 2. Suitable for uneven land.
 3. Reduces soil erosion.
- (Any two)

19. What is drainage? Why is it important?

Answer:

Drainage is the removal of excess water from the soil.

Importance:

1. Prevents waterlogging.
2. Improves root growth and crop yield.

20. Write any two uses of cultivator.

Answer:

1. Loosening soil.
 2. Weed control.
 3. Intercultural operations.
- (Any two)

OR

What is water harvesting?

Answer:

Water harvesting is the collection and storage of rainwater for future agricultural use.

21. Name any two vegetable crops grown in winter season.

Answer:

Cauliflower, Cabbage, Radish, Carrot, Spinach.

(Any two)

OR

Name any two oilseed crops.

Answer:

Mustard, Sunflower, Sesame, Groundnut.

(Any two)

Section C – Short Answer Questions

(3 Marks Each)

22. Differentiate between Kharif and Rabi crops.

Kharif Crops	Rabi Crops
Sown in June–July	Sown in October–November
Need warm and wet climate	Need cool and dry climate
Example: Rice, Maize	Example: Wheat, Mustard

23. Explain the climatic and soil requirements of wheat.

Answer:

- Wheat requires cool climate during growth and warm weather at maturity.
- Optimum temperature is 15–25°C.
- Well-drained loamy soil is best.
- Soil should be fertile and rich in nutrients.

24. What are the constraints limiting crop production in dryland areas?

Answer:

- Low and uncertain rainfall.
- Soil moisture deficiency.
- Soil erosion.
- Lack of irrigation facilities.
- Poor soil fertility.

OR

Explain watershed management.

Answer:

Watershed management is the scientific management of land and water resources in a watershed area to conserve soil and water, increase groundwater recharge and improve agricultural production.

25. Describe the functions of seed-cum-fertilizer drill.

Answer:

- Places seed uniformly in rows.
- Applies fertilizer simultaneously.
- Maintains proper seed depth.
- Saves time and labour.

26. Explain the adverse effects of waterlogging on soil and crops.

Answer:

- Reduces soil aeration.
- Root growth is affected.
- Nutrient uptake decreases.
- Crop yield is reduced.

OR

Describe drip irrigation and its advantages.

Answer:

Drip irrigation supplies water directly to the root zone through pipes and emitters.

Advantages:

1. Saves water.
2. Reduces weed growth.
3. Increases water-use efficiency.
4. Improves crop yield.

27. Write short notes on:

(a) Harrow

Answer:

A harrow is a secondary tillage implement used to break soil clods, level the field and prepare a fine seedbed.

(b) Cultivator

Answer:

A cultivator is used for stirring soil, removing weeds and performing intercultural operations between crop rows.

(1.5 marks each)

Section D – Essay Type Questions (5 Marks Each)

28. Explain the cultivation practices of rice.

Answer:

- Climate: Warm and humid climate.
- Soil: Clayey or loamy soil with good water retention.
- Sowing/Transplanting: Nursery raising followed by transplanting.
- Fertilizers: Application of FYM and recommended NPK fertilizers.
- Harvesting: Crop harvested when grains become mature and golden yellow.

OR

Explain the cultivation practices of maize.

Answer:

- Warm climate required.
- Well-drained fertile loamy soil.
- Timely sowing during Kharif season.
- Recommended seed rate and fertilizer application.
- Harvesting after maturity of cobs.

(Any five points)

29. Discuss various agricultural implements.

Answer:

1. M.B. Plough – primary tillage.
2. Harrow – secondary tillage.
3. Cultivator and Rotavator – soil preparation.
4. Seed-cum-fertilizer drill – sowing.
5. Sprayer – plant protection.
6. Harvesters and threshers – harvesting and threshing.

(Any five points)

OR

Explain advantages and disadvantages of farm power machinery.

Advantages:

- Saves labour.
- Saves time.
- Increases efficiency.
- Ensures timely farm operations.

Disadvantages:

- High initial cost.
- Requires fuel and maintenance.
- Small farmers may not afford machinery.

30. Define Subsistence Agriculture. Explain its characteristics, merits, demerits and importance in Haryana.

Answer:

Definition:

Subsistence agriculture is farming mainly carried out to meet the needs of the farmer's family.

Characteristics:

- Small land holdings.
- Family labour.
- Traditional methods.

Merits:

- Provides food security.
- Low investment.

Demerits:

- Low productivity.
- Limited market surplus.

Importance in Haryana:

- Supports rural families.
- Provides employment.
- Maintains traditional farming systems.

OR

Describe the methods of cultivation in Subsistence Agriculture.

Answer: (Any five relevant points)

- Use of family labour.
- Traditional farm tools.
- Mixed farming.
- Crop rotation.
- Rainfed cultivation.
- Small-scale production for self-consumption.