# St. Andrews Scots Sr. Sec. School

9th Avenue, I.P. Extension, Patparganj, Delhi – 110092 Session: 2025-2026 – Answer Key

Class: VIII Subject: Science Chapter: Crop Production

#### PRACTICE TIME

#### A. Tick ( $\checkmark$ ) the correct answer:

1. (d) 2. (d) 3. (a) 4. (a) 5. (d)

#### **B.** Assertion-Reason Type Questions:

1. (a) 2. (d) 3. (b) 4. (d) 5. (b)

#### C. Rewrite the wrong sentences by substituting the wrong word with the correct one:

- 1. Beans, peas and green gram are examples of pulses.
- 2. Growing fruits and vegetables are called horticulture.
- 3. Milk contains all vitamins except vitamin C.
- 4. Fallowing is leaving the field vacant for one or more seasons to regain its fertility.
- 5. Drip irrigation is used in areas where there is water shortage.

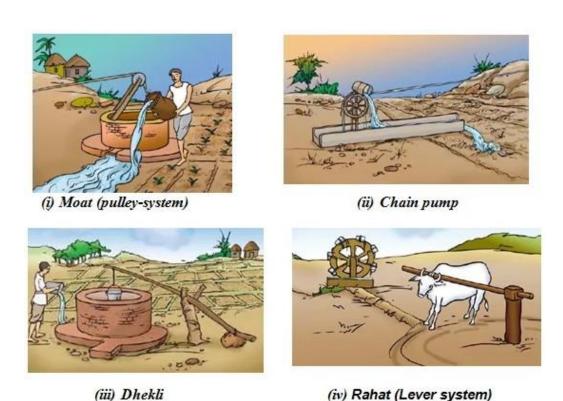
#### **D. Very Short Answer Type Questions:**

- 1. Ploughing and levelling.
- 2. Some oilseed crops are mustard, groundnut, sunflower, soyabean and coconut. Plantation crops are tea, coffee, cocoa and rubber.
- 3. Cultivator is used for ploughing a field by using a tractor.
- 4. By transplantation, only healthy seedlings are planted with sufficient spacing between them. This increases crop production.
- 5. Drip irrigation provides water drop by drop near the roots of plants. In this way, water is not wasted at all and plants get regular supply of water.
- 6. Silos are tall cylindrical containers for bulk storage of grains.

#### **E. Short Answer Type Questions:**

1. By using a seed drill, seeds are sown uniformly in the furrows only. This prevents the wastage of seeds, saves time and labour.

- 2. Manuring is done to regain the fertility of soil. It also improves soil texture and helps it retain moisture.
- 3. Fertilisers are easily absorbed and utilised immediately by the plants. They provide specific nutrients to the crop.
- 4. Moat, Rahat, Dhekli, Chain pump and Swinging basket are the traditional methods of irrigation.



5. During Green Revolution, new varieties of wheat were developed by cross breeding methods using high-yielding dwarf varieties of wheat from Mexico and Australia.

#### F. Long Answer Type Questions:

- 1. (a) The unhealthy seeds are separated from healthy seeds by soaking them in water. The healthier seeds settle down at the bottom and unhealthy seeds being hollow and lighter as they are eaten by pests, float on the surface of water.
- (b) (i) Manual or Broadcasting method of sowing involves scattering of seeds by hand. The scattered seeds are later covered with soil.
- (ii) Mechanical method of sowing involves sowing seeds using a seed drill. It makes furrows in the soil and allows the seeds to fall at regular distances in the furrows.
- 2. (a) Manures are organic substances formed by the decomposition of waste matter by microorganisms. They are not nutrient-specific but provide all the nutrients to the soil. They

are absorbed by plants slowly. Fertilisers are synthetic chemical compounds manufactured in factories. They are nutrient specific and are absorbed by plants quickly.

- (b) Use of fertilisers in excess is disadvantageous because they damage the crop and pollute the soil as well as nearby waterbodies on washing by rainwater.
- (c) Manure made from farm waste such as cattle dung and urine, straw, leaves, etc. is called farmyard manure.
- 3. Modern methods of irrigation are:
- Furrow irrigation: In this method, water runs in the field through furrows between two rows of the crop.
- Basin irrigation: In this method, the entire field is made overflood with water.
- Sprinkler irrigation: In this method, perpendicular pipes are laid at regular intervals in the field. They are joined to the main pipeline and have rotating nozzles at the top end. The water through rotating nozzles gets sprinkled over the crop plants.



Sprinkler System

• Drip irrigation: In this method, water is provided to the plants drop-by-drop, near their roots.



Drip system

## Advantages of using modern methods of irrigation

• Modern methods of irrigation avoid wastage of water and help in water conservation.

- These methods prevent loss of water by evaporation.
- These methods ensure equal distribution of water to different parts of the field, especially where the land is uneven.
- 4. They are weeding. The removal of unwanted plants growing naturally with crop plants without harming them is called weeding. Yes, it is an important step in agriculture because weeds compete with crop plants and use most of the nutrients. This hampers the growth as well as yield of crop plants.

### 5. (a) Sprinkler irrigation



Sprinkler System

- (b) When soil is sandy or land is uneven and proper distribution of water is not possible.
- (c) It distributes water evenly, saves water and prevents water logging.
- 6. After harvesting, the grains can be eaten up by rodents and insects, and can also be attacked by fungus which can destroy them.

On domestic level, grains are stored in small metallic containers mixing with powdered neem leaves and black pepper.

On commercial level, seeds are stored in gunny bags, in silos and granaries. The stored area is sprayed regularly with chemicals to kill or repel pests without affecting the stored grains.

- 7. We get milk, honey, eggs and meat from animals.
- Milk is used to prepare many other food items such as curd, cheese, butter, ghee, sweets, etc.
- Honey is used to prepare a large number of Ayurvedic medicines.
- Eggs and meat are used to prepare different types of eatables.

#### **G. HOTS Questions:**

1. It is important to irrigate the crop field before sowing the seeds because seeds germinate in the presence of moisture.

- 2. If distance and depth are not maintained at the time of sowing of seeds, the seeds will not get sufficient amount of water and oxygen and after germination they will not be able to get sufficient amount of light and air to grow well.
- 3. Wheat (rabi crop) and groundnut (kharif crop). Leguminous crops replenish nitrogen in soil because these plants have nitrogen-fixing bacteria in their root nodules. Yes, Birendra is doing right thing because crop rotation enriches the soil as nutrient used by one crop are replenished by another crop growing on the same land. For example, after growing wheat crop, growing a leguminous crop such as groundnut or soyabean can replenish the nitrogen content of soil by its nitrogen-fixing bacteria, Rhizobium which live in its root nodules.

## **Passage/Case-based Questions**

- 1. Pesticides obtained from plants or animals are called biopesticides. These are pyrethrin obtained from Chrysanthemum plant and azadirachtin obtained from neem tree.
- 2. Biopesticides and bio fertilisers are better than chemical pesticides and fertilisers because they do not cause environmental pollution.

#### H. Science Quiz/Puzzle

1. THRESHING 2. CROP, COMBINE 3. CROP ROTATION 4. IRRIGATION 5. WINNOWING 6. HARVESTING 7. EGGS 8. PLOUGH 9. WEEDING 10. MANURE