

**Marking Instructions**

**AGRICULTURE -11<sup>TH</sup> (2025-26)**

**Section -A**    **Objective type question (all questions are compulsory each has 1 mark).**

<b>Q. NO.</b>	<b>ANSWERS</b>
1	(a) Uttar Pradesh
2	(a) Murrah
3	(c) Haryana
4	<i>d) all of the above</i>
5	© <i>microbiology</i>
6	(b) 1.5 mm
7	microorganisms
8	THREE GROUP
9	JUNE
10	FROST
11	GENETIC
12	O -ve
13	Biological
14	Pollinated
15	Apple OR Corn

**Section -B**    **Very Short answer type question (each has 2 marks).**

**16. Name at least four type of weather Hazards.**

ANS. Cyclon, Heat Wave, Cold Wave, Hail Storm

**17. Define Heredity?**

ANS. Heredity is the biological process by which a parent passes genetic characteristics or traits to their offspring through genes and DNA. This natural transmission of traits from one generation to the next is often referred to as inheritance

**18. Define Enzymes.**

**Ans.** Enzymes are biological catalysts, predominantly proteins, that speed up biochemical reactions in living organisms without being consumed in the process

**19. Name atleast four livestock of india.**

Ans. Cattle, Buffalow, horse, dog, cat.

**20. Name at least two woolen animals.**

Ans. Sheep, Merino, Angora Goat, Angora Rebbit.

**OR**

**Define ruminant animal.**

Ans. A ruminant is an herbivorous animal, such as a cow, sheep, or deer, that has a specialized four-chambered stomach and the ability to regurgitate food to chew it again in a process called rumination

**21. Name atleast four fodder crops of haryana.**

Ans. Sorghum, oat, barseem, maize

**OR**

**What is Biofertilizer?**

Ans. A biofertilizer is a substance, typically containing living microorganisms like bacteria, fungi, or algae, that is applied to soil or seeds to promote plant growth by increasing the supply and availability of essential plant nutrients, such as nitrogen and phosphorus, ie BGA, Ozola, azatobector etc.

**Section -C    Short answer type question (each has 3 marks).**

**22. Write at least six blood group name.**

Ans. A+, A-, B+, B-, O+, O-, AB+, and AB-

**23. Describe self pollination and cross pollination.**

**Ans.** Self-pollination is the transfer of pollen to the stigma of the same flower or another flower on the same plant, which maintains genetic consistency but can lead to weaker offspring, while cross-pollination is the transfer of pollen between flowers of different plants, promoting genetic diversity, greater adaptability, and healthier offspring but relying on external agents like wind or insects

**24. Writre short note on carbohydrates.**

**Ans.** Carbohydrates are organic molecules made of carbon, hydrogen, and oxygen that serve as the body's primary source of energy, breaking down into glucose for immediate use or storage. They are categorized into simple carbs

(sugars like glucose and fructose found in fruits) and complex carbs (starches and fibers found in grains, vegetables, and legumes)

**25. What is difference between monosaccharides & disaccharides.**

Ans. Monosaccharides are the simplest carbohydrates (simple sugars), like glucose, fructose, and galactose, that cannot be broken down further. Disaccharides are carbohydrates made of two monosaccharides linked by a glycosidic bond. Common examples of disaccharides are sucrose (glucose + fructose), lactose (glucose + galactose), and maltose (glucose + glucose).

**26. What is soil fertility? OR Describe role of nitrogen in plants.**

Ans. Soil fertility is the capacity of soil to sustain healthy plant growth and yield by providing essential nutrients, water, and air in adequate amounts and proportions

**OR**

**Role of nitrogen in plants:** Nitrogen is absorbed by plant roots as nitrate or ammonium ions, and deficiencies can lead to yellowing leaves and stunted growth, while excess can cause weak, large leaves.

**27. Write at least six organs of buffalo.**

**ANS.** heart, liver, kidneys, lungs, stomach, and tongue.

**OR**

**Write at least three indigenous breeds of cattle**

**Ans.** 1. Gir · 2. Red Sindhi · 3. Sahiwal

**Section -C Short answer type question (each has 3 marks).**

**28. Describe concepts and applications of plant biotechnology.**

Ans. Plant biotechnology is applied to improve crops for increased yield and nutritional value, such as in pest-resistant and herbicide-tolerant crops and bio-fortified varieties like Golden Rice. It also creates plants tolerant to environmental stressors (drought, salt), produces plants that can synthesize valuable chemicals or pharmaceuticals (including plantibodies), and facilitates large-scale propagation and germplasm conservation of elite plant varieties through tissue culture

**OR**

**Difference between sexually propagated & asexually propagated crops.**

Ans. Sexually propagated plants grow from seeds resulting from the fusion of male and female gametes, creating genetically diverse offspring. In contrast, asexually propagated plants grow from vegetative parts (like stems, leaves, or

roots) or specialized structures such as bulbs and tubers, yielding offspring that are genetically identical clones of the parent plant.

## 29. Describe care and management of different livestock.

### Housing and Environment

- **Shelter:** Provide clean, dry, and well-ventilated shelters that protect animals from extreme weather conditions.
- **Cleanliness:** Regularly clean animal sheds and ensure proper drainage to remove waste and prevent disease.
- **Space:** Offer adequate space for animals to move comfortably, and separate sick animals for isolation.

### Nutrition and Feeding

- **Water:** Ensure a constant supply of clean drinking water, as it is the most crucial nutrient for livestock health.
- **Balanced Diet:** Provide appropriate and balanced nutrition to meet the animals' growth and productivity needs.
- **Feeders and Waterers:** Use feeders and water troughs that minimize feed loss and prevent contamination.

### Health and Disease Management

- **Veterinary Care:** Monitor animals for signs of illness and consult a veterinarian for timely treatment.
- **Vaccination:** Implement a vaccination program to prevent common diseases that affect livestock.

## 30. Describe sign and symptoms of important disease of livestock and poultry.

Ans. Important livestock diseases include Foot-and-Mouth Disease, Anthrax, and Brucellosis, which are highly contagious and can cause significant economic losses. Major poultry diseases are Newcastle Disease and Infectious Bursal Disease, known for their high mortality rates and the need for vaccination. Other critical diseases are Avian Influenza, Marek's Disease, Fowl Cholera, and various bacterial and parasitic infections in both livestock and poultry.

OR

### What is the scope of poultry production in india?

The scope of India's poultry sector is vast and growing, driven by rising domestic demand for protein-rich foods, increasing urbanization, and favorable dietary shifts, leading to a projected significant market growth and export potential. The sector is characterized by a fast-growing, largely organized commercial segment contributing significantly to the economy and

employment, with opportunities for further development in processing, supply chain optimization, and rural integration.