AGR (Marking Instructions)-9TH (2025-26)

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

Q. NO.	ANSWER
1	c) 46
2	(c) FYM
3	c) 17
4	(c) Urea
5	c) Less then 7
6	(d) all of the above
7	Female
8	ROOTS
9	Fertiigation
10	Rose, chrysanthmum
11.	Lemon, Orange
12.	Asexual
13	Orange
14.	Litchi
15	Micro Irrigation

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

16. Enlist primary nutrients under macro Nutrients.

Ans.: N P K- NITROGEN, PHOSPHORUS, POTASH

17. What is earth atmosphere?

ANS. A mixture of gases, aerosols and other particles held to the planet by gravity, forming layers that protect the earth and support life. Composed mainly nitrogen about 78% and oxygen about 21%.

18. What is precipitation? OR Classify precipitations.

Ans. Precipitation is water vapor that has condensed from clouds to fall as liquid (rain) or solids (snow, hail). Precipitation is the part of the water cycle that delivers water from the atmosphere to the Earth's surface.

OR

Classification: drizzle, rain, freezing rain, sleet, snow, graupel, and hail.

19. Name atleast 4 parts of a plant.

Ans. ROOT, STEM, LEAF, BRANCH, BUD

20. Name atleast 4 fruit tree found in Haryana.

ANS. GUVAVA, PITCH, LIME, MALTA

21. What is pruning? OR What is training?

ANS. Training: When a plant is made to grow with or without support,

in a desired fashion by removing or fastening some of its parts with a view to give it a better framework or shape, the operation is called 'training'.

OR

Pruning: Judicious removal of any part of a plant to divert sap towards its producing areas, leading to an improvement in the quality of yield is called 'pruning'. It is done during the later stage of plant life when it becomes ready to produce flowers and fruits. Decayed parts can also be pruned off

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

22. Write methods of fertilizer application under rainfed and irrigated conditions.

ANS. **I**. Broadcasting:

II. Placement:

III. Contact placement / combined drilling / drill placement.

IV. Side dressing

23. Describe soil testing.

Ans. Soil testing helps ascertain the status of various nutrients, soil fertility level, pH, etc. It is important to know the fertility status and physical properties of a soil for maximum production and rational soil

management. A complete soil test programme essentially consists of three basic steps.

(i) Soil sampling

(ii) Soil testing

(iii) Soil test interpretation

24. Define Atmospheric Humidity.

Ans. Atmospheric humidity is the amount of water vapor present in the air, a key factor in weather and climate that influences precipitation, cloud formation, and human comfort. It can be expressed in several ways, including relative humidity (the percentage of water vapor compared to the air's maximum capacity), absolute humidity (the actual mass of water vapor), and specific humidity (the ratio of water vapor mass to total air mass)

25. Name various branches of agriculture.

Ans. The major branches of agriculture include **Agronomy** (crop management), **Horticulture** (fruits, vegetables, flowers), **Animal Husbandry** (livestock), **Forestry** (trees), **Fishery Science** (fish), **Agricultural Engineering** (equipment and structures), and **Agricultural Economics** (business aspects)

26. What is tillage? name two type of farming.

Ans. **tillage**, in agriculture, the preparation of soil for planting and the cultivation of soil after planting. Tillage is the manipulation of the soil into a desired condition by mechanical means; tools are employed to achieve some desired effect (such as pulverization, cutting, or movement). Soil is tilled to change its structure, to kill weeds, and to manage crop residues. **Types:** Dairy farming , mixed farming

OR

Name atleast three revolutions.

Ans. Green Revolution, White Revolution, Blue Revolution

Silver revolution, Round Revolution, Yellow Revolution

27. Describe key aspects of plant morphology.

OR

Classify plant life based on life cycle.

ANS. Key aspects of plant morphology include the study of external features such as roots, stems, leaves, flowers, fruits, and seeds, examining their structure, form, size, color, and patterns. This includes understanding different types of roots (like taproot and fibrous root systems), stem modifications, leaf types (simple versus compound), the parts of a flower, various fruit classifications (fleshy and dry), and the differences between monocot and dicot seeds.

Section -D **Essay answer type question (each has 5 marks).**

28. What is Fertilizer? Give classifications with examples.

ANS. Fertilisers are artificially made of chemicals, which supply essential nutrients to plants. They are available in concentrated forms and contain higher amount of nutrients than manure, and are, therefore, used in small quantities. There are three kinds of fertilisers

used for vegetable crops *viz.*, nitrogenous, phosphatic and potassium. Fertilisers can also be classified into straight, compound and mixed.

CLASSIFICATION: ***Sole fertiliser, MIXED Fertilizer***

OR

Define plant Nutrients. Explain macro and micro nutrients.

ANS. There are a total of 17 nutritive elements, which are necessary for the growth of plants. All elements are equally important irrespective of their requirement or

presence in a plant.

Macro-nutrients

This is further divided into:

• *Primary nutrients*: These consist of Nitrogen, Phosphorus and Potassium. These nutrients are supplied through fertilisers.

• *Secondary nutrients*: They include Calcium, Magnesium and Sulphur.

Micro-nutrients

They are also known as minor or trace elements. They include Iron (Fe), Manganese (Mn), Copper (Cu), Zinc (Zn), Chlorine (Cl), Boron (B) Molybdenum (Mo) and Nickel (Ni).

29. Define soil, enlist major soils found in india.

Ans. Soil is derived from the Latin word *Solum*. It may be defined as a natural body developed as a result of weathering of rocks, in which plants and other forms of life grow and prosper. It is the upper loose layer of the earth crust rich in nutrients and minerals on which

plants grow. Soil is composed of minerals (45–50%), organic matters (0.5–5%), water (25%) and a large number of plants, animals and microbes.

Types: Red soil, Black Soil, Alluvial Soil, leterite soil, desert soil, forest & Hilly soil, Marshy and Peat soil

OR

Define soil texture, describe clay and sand soil.

Soil particles namely sand, silt and clay(known as soil texture) are classified according to their size. Clay particles are the finest and are smaller than 0.002 mm in diameter. Loam particles are 0.002–0.02 mm in diameter. Silt particles have 0.02–2.0 mm diameter. Particles larger than 2 mm are sand, gravel or stones. Most soils contain a mixture of sand, silt and clay in different proportions.

30. What is IPM? Describe important pests and diseases control methods.

Ans. IPM includes all types of control measures, such as cultural, physical, mechanical, biological and chemical as per the suitability of application, that control the pest population below the economic injury level.

Cultural methods

Routine agronomic practices can be utilised for minimising pest infestation by slight modification in timing or method of their application. These functions are preventive methods.

Resistant cultivars, Clean cultivation, Tillage, Intercropping, Crop-rotation, Trap crops

Mechanical methods

This reduces pest control by manual devices. Mechanical methods along with physical and cultural methods are effective in reducing pest populations.

Biological control

Insects have some natural enemies. Predators, parasitoids, microbes, birds and other animals are useful in minimising insect pests.

- Predators, Parasites, Pathogens, Botanical insecticides etc.

Chemical control

Use of fungicides chemical or a combination of chemicals lethal to the fungi that saves the host from infection is called fungicide. Fungicides, according to their movement in the plant system, are of two types. The first one is systemic,which when applied on plants dissolves on the cell sap and is effective for the whole plant irrespective of where it is applied. For example, benlate, carbendazim, metalaxyl, thiobendazol, propiconazole, etc.