Class-XII
AGRICULTURE

SEMESTER-I

Structure of Question Paper (Theory)

Theory	**Time-3 hrs.**	**Marks: 70**
CCE/Internal Assessment		**Marks: 10**

1. There will be one theory paper comparing of 30 questions. All questions will be compulsory
2. Marks for each question are indicated against it.
3. Question Nos.1-10 are very short answer (objective) type questions carrying one (1) mark each. Answer to each question will be in one line or few words only.
4. Question Nos. 11-18 are short answer type questions carrying 2 marks each. Answer to each question will be in 20-30 words.
5. Question Nos.19-26 are short answer type questions carrying 3 marks each. Answer to each question will be in 40-50 words.
6. Question Nos. 27-30 are long answer type questions carrying 5 marks each. Answer to each question will be in 80-100 words.
7. In question Nos. 27-30 there will be 100% internal choice.
8. The question paper should be strictly from the prescribed syllabus subject to the above mentioned guidelines.
9. "Candidates will be provided with one answer book of 32 pages only. No extra/continuous sheet will be provided.

Syllabus (Theory)

Unit-I: Agriculture Biology-Botany -35 Marks

1. Heredity-Mendel's Laws of Heredity.
2. Anatomy-Internal structure of dicot and monocot stem, root and leaf.
3. Simple, compound and special types of inflorescence.
4. Types of pollination and agencies responsible for pollination.
5. Fertilization and development of seed and fruit.
6. Types of fruit and seed dispersal.
7. Study of general character and economic. Importance of following of flowering plants with reference to types mentioned in bracket.
   - (a) Cruciferae (Brassica, Raphanus)
   - (b) Malvaceae (Gossypium, Okra)
   - (c) Rutaceae (Citrus, Murraya)
   - (d) Papilionaceae (lathyrus,pisum)
   - (e) Rosaceae (Rose, Prunus)
   - (f) Solanaceae (Petunia, Solanum)
   - (g) Cucurbitaceae (luffa, cucurbita)

(h) Gramineae (Avena, Triticum)

8. Brief account of photosynthesis, respiration and transpiration.

Unit-II: Agriculture Biology-Zoology -35 Marks.

1. Introduction to Zoology, Characteristics of living organisms. Elementary knowledge about RNA, DNA. Enzymes and hormones.
2. Zoological nomenclature and principles of classification. Origin of life. Evidence and theories of evolution.
3. General characteristics of class Mammalia Elementary functional anatomy of rabbit with special reference to digestive, respiratory circulatory and urinogenitial systems.
4. Insects- their growth development and anatomy with ak-grass hopper as a type.
5. Animals of economic importance to agriculture.

Syllabus (Practical)

Agriculture Biology

Part-A

1. Anatomical study of dicot and monocot stem root and leaf form permanent slides.
2. Identification and study of specimens of different types of inflorescence.
3. Identification and study of specimens of different types of fruits.
4. Identification botanical description of plants/plant parts of the families mentioned in the theory
5. Experiments related to photosynthesis, respiration and transpiration.

Part-B

1. Economic importance of farm animals.
2. Histology study of prepared slides of compound tissues and organs.
3. Study of mammalian eye and heart from models.
4. Study of various systems of rabbit from models/charts.
5. Identification of major insect pests and diseases of important farm crops.

Note: - Practical's will be conducted as per given syllabus but no Board examination will be conducted at the end of Semester-I.

SEMESTER-II

Structure of Question Paper-II (Theroy)

Theory Paper	**Time : 3 Hrs**	**Max Marks :70**
Practical Paper	**Time : 3 Hrs**	**Max Marks : 30**
		CCE/Internal Assessment Marks 20

Structure of Question Paper will be same as given for Semester-I. Objective type Questions (1-10) will be from whole of the syllabus.

Syllabus (Theory)

Unit-1: Soil and Crop Management Practices— 35 marks

Soil as a growth medium Essential elements, organic manures, chemical fertilizers and bio fertilizers Reclamation of alkaline and saline soils erosion; causes and remedial measures. Crop management practices : selection of varieties, seedbed preparation seed rate time and method of sowing, manuring and fertilization irrigation weed management, harvesting threshing and marketing of wheat rice maize cotton sugarcane sunflower mustard gram moongjawar barseem peas, tomato and brinjal Cultivation of important fruit crops –ber, guava and grapes. Major insect pests and diseases their symptoms and control measures of above crops. Fruit preservation and post harvest technology.

Unit-2 Livestock Farming and Poultry Production:- 35 marks

Livestock farming Role of livestock and poultry in agriculture Breeds of diary animals and poultry, Commercial dairy farming and poultry production Management of newly born calf, pregnant and milch animals, artifical Insemination pregnancy diagnosis and detection of heart id dairy animals . Cross breeding Dairy animal and poultry diseases-foot and mouth H.S. mastitis black quarter rani kheit and bird flu common feeds of dairy animals and importance of meat and egg in humar foods.

PRACTICAL

One Practical Paper | Time: 3 Hrs. | Marks: 30

Structure of Question Paper

1. The question paper will be set up by the examiner on the spot.
2. A group of student for the practical should not be more than 20 students.
3. There will be two sections in the question paper.

SECTION-I

Agriculture Biology-One question each from Botany and Zoology.

SECTION-II

Soil and Crop Management Practices including Livestock- Two Questions
Farming and Poultry Production

1. Note book and viva-voce 10 marks
2. 4 questions of 5 marks each 20 marks

The examiner must set the question according to the facilities available at the exam centre.

SYLLABUS (PRACTICAL)

Soil and Crop Management Practices including Livestock
Farming and Poultry Production

1. Note book and viva voce
2. 4 question of 5 marks each

The examiner must set the question according to the facilities available at the exam centre.

List of Practicals.

1. Seedbed preparation and sowing of major field crops.
2. Method of weed control.
3. Methods of irrigation.
4. Types of fertilizers and their application
5. FYM and its preparation.
6. Identification of major pests and diseases of different crops.
7. Practices in training and pruning of horticultural plants, their fertilization irrigation.
8. Livestock production
9. Poultry farming
10. Judging of dairy animals.
11. Fruit preservation
12. Maintenance and utility of farm records.

Note: Practical examination will be conducted by the Board at the end of Semester II from the 100% Practical Syllabus (i.e. Semester-I and Semester-II)