BOARD OF SCHOOL EDUCATION HARYANA

Syllabus and Chapter wise division of Marks (2025-26)

Class: 12th Subject: Agriculture Code: 815

General Instructions:

1. There will be an Annual Examination based on the entire syllabus.
2. The Annual Examination will be of 60 marks, Practical Examination will be of 20 marks and 20 marks weightage shall be for Internal Assessment.
3. For Practical Examination:

   i) Written test of two questions of 5 marks each

   ii) Practical record of 5 marks.

   iii) Viva-voce of 5 marks.

4. For Internal Assessment:

There will be Periodic Assessment that would include:

i) For 4 marks- Two SAT exams will be conducted and will have a weightage of 04 marks towards the final Internal Assessment.

ii) For 2 marks- One half yearly exam will be conducted and will have a weightage of 02 marks towards the final Internal Assessment.

iii) For 2 marks- One Pre-Board exam will be conducted and will have a weightage of 02 marks towards the final Internal Assessment.

iv) For 2 marks- Subject teacher will assess and give maximum 02 marks for CRP (Classroom participation).

v) For 5 marks- A project work to be done by students and will have a weightage of 05 marks towards the final Internal Assessment.

vi) For 5 marks- Attendance of student will be awarded 05 marks as:

75% to 80% - 01 marks
Above 80% to 85% - 02 marks
Above 85% to 90% - 03 marks
Above 90% to 95% - 04 marks
Above 95% to 100% - 05 marks

Course Structure (2025-26)

Class: 12th **Subject: Agriculture** **Code: 815**

Sr. no.	Chapter	Marks
1	Introduction to crop production	03
2	Crop production: soil fertility, fertilizers and manures	05
3	Crop Production: Irrigation and drainage	05
4	Crop Production: weed control	05
5	Crop Production: Different crops	10
6	Horticulture: Introduction to horticulture production	05
7	Horticulture: Cultivation of fruit crops	09
8	Horticulture: Cultivation of vegetable crops	09
9	Horticulture: Cultivation of flowering plants	09
Total		60
Practical		20
Internal Assessment		20
Grand Total		**100**

Chapter 1: Introduction to crop production

Classification of crops. Crop seasons, methods, time and depths of sowing of major field crops. Effect of different weather parameters on crop growths and development. Seeds and sowing, tillage and tilth, crop density and geometry. Crop rotation, cropping system, relay cropping, inter cropping and mixed cropping.

Chapter 2: Crop production: soil fertility, fertilizers and manures

Definition of soil fertility and productivity, Essential plant nutrient; criteria of essentiality, role and deficiency symptoms of essential plant nutrients. Soil testing and critical levels of different nutrients in soil. Fertilizer recommendations to different crops. Introduction and importance of organic manures, characteristics of organic manures (Farm yard manure, vermicompost, poultry manure, press mud, biogas slurry and green manure). Chemical fertilizers, properties of major nitrogenous, phosphatic, potassic fertilizers, secondary and micronutrient fertilizers. Methods of fertilizer application under rainfed and irrigated conditions.

Chapter 3: Crop Production: Irrigation and drainage

Importance and role of water in crop production, water stress and its effect on crop growth, irrigation: definition, source of irrigation, Scheduling and methods of irrigation, prevention of water losses and water use efficiency, Drainage and methods of drainage, adverse effect of water logging on soil and crop growth; irrigation strategies under limited water conditions; micro/pressure irrigation: sprinkler, drip irrigation.

Chapter 4: Crop Production: weed control

Introduction to weeds, characteristics of weeds their harmful and beneficial effects on ecosystem. Classification, reproduction and dissemination of weeds. concept of weed management, it's principles and methods, Herbicide classification and their use. Herbicide Resistance and its management. Integrated weed management

Chapter 5: Crop Production: Different crops

Economic importance, soil and climatic requirements, varieties, cultural practices and yield of different crops; cereals- wheat, barley rice, maize and pearl millet; pulses-chickpea, pea, pigeon-pea, mungbean and urdbean; oilseeds- rapeseed, mustard, sunflower and groundnut; fibre crops- cotton; forage crops-sorghum, berseem and oat; sugar crops- sugarcane;

Chapter 6: Horticulture: Introduction to horticulture production

Horticulture-Its definition and branches, importance and scope; horticultural and botanical classification; climate and soil for horticultural crops; Plant propagation-methods principles of orchard establishment; Principles and methods of training and pruning, juvenility, fruit drop, fertilization and parthenocarpy; use of plant bio-regulators in horticulture. Irrigation & fertilizers application method and quantity.

Chapter 7: Horticulture: Cultivation of fruit crops

Importance and scope of fruit crop industry in India; Use of rootstocks; Production technologies for the cultivation of major fruits-mango, ber, amla, date palm, sapota, plum, citrus, grape, guava, litchi, papaya, pear, peach and pomegranate.

Chapter 8: Horticulture: Cultivation of vegetable crops

Importance of vegetables in human nutrition and national economy, brief about origin, area, production, climate and soil requirement, improved varieties and cultivation practices such as sowing time, sowing, nursery raising, transplanting, fertilizer requirements, irrigation, weed management, harvesting, physiological disorders, insect-pests, diseases of important vegetables- potato, tomato, brinjal, cauliflower, radish, carrot, okra, musk melon, water melon, bottle gourd, bitter gourd, and spices-onion, garlic.

Chapter 9: Horticulture: Cultivation of flowering plants

Importance and scope of ornamental crops and landscaping. Principles of landscaping. Landscape uses trees, shrubs and climbers. Production technology of important cut flowers like rose, gerbera, carnation, lilium and orchids under protected conditions and gladiolus, tuberose, chrysanthemum under open conditions. Package of practices for loose flowers like marigold and jasmine under open conditions.

Practicals:

1. Identification of crops, seeds, fertilizers and tillage implements.
2. Methods of herbicide and fertilizer application.
3. Determination of pH, EC and organic carbon of soil.
4. Determination of available Nitrogen in soil sample.
5. Determination of available Phosphorus in soil sample.
6. Determination of available potassium in soil sample.
7. Study of soil moisture measuring methods.
8. Identification of weeds in crops.
9. Calculations of herbicide doses.
10. Identification of different field and horticulture crops.
11. Identification of different fertilizers.
12. Numerical exercises on fertilizer requirement for different crops.
13. Nursery bed preparation and seed sowing of vegetable crops.
14. Demonstration of grafting, budding, layering and cutting.
15. Visit to commercial nurseries/orchard.

Month wise Syllabus Teaching Plan (2025-26)

Class: 12th **Subject: Agriculture** **Code: 815**

Month	Subject- content	Teaching period	Revision period	Practical work
April	**Chapter 1. Introduction to crop production** **Practicals:** 1. Identification of crops, seeds, fertilizers and tillage implements.	12	02	4
May	**Chapter-2: Crop production: soil fertility, fertilizers and manures** **Practicals:** 2. Methods of herbicide and fertilizer application. 3. Determination of pH, EC and organic carbon of soil.	20	02	2 1
June	Summer Vacation (Project Work)			
July	**Chapter-3: Crop Production: Irrigation**	20	02	

	and Drainage **Practicals:** 4. Determination of available Nitrogen in soil sample. 5. Determination of available Phosphorus in soil sample. 6. Determination of available potassium in soil sample.			1 1 1
August	**Chapter 4: Crop Production: weed control** **Practicals:** 7. Study of soil moisture measuring methods. 8. Identification of weeds in crops. 9. Calculations of herbicide doses.	20	02	2 1 1
September	**Chapter 5: Crop Production: Different crops** **Practical**: 10. Identification of different field and	20	4	2

	horticulture crops. Revision Half Yearly Examination		6	
October	**Chapter 6: Horticulture: Introduction to horticulture production** **Practical:** 11. Identification of different fertilizers. 12. Numerical exercises on fertilizer requirement for different crops.	16	04	4 4
November	**Chapter 7: Horticulture: Cultivation of fruit crops** **Practicals:** 18. Practical approach of identification of different species of animals with their external characteristics.	18	4	
December	**Chapter 8: Horticulture: Cultivation of vegetable crops** **Practicals:**	20	4	

	13. Nursery bed preparation and seed sowing of vegetable crops.			4
January	**Chapter 9: Horticulture: Cultivation of flowering plants** **Practicals:** 14. Demonstration of grafting, budding, layering and cutting. 15. Visit to commercial nurseries/orchard.	18	4	 2 2
February	**Revision**		20	
March	**Annual Examination**			

Note:

- **Subject teachers are advised to direct the students to prepare notebook of the Terminology/Definitional words used in the chapters for enhancement of vocabulary or clarity of the concept.**

Question Paper Design (2025-26)

Class: 12th **Subject: Agriculture** **Code: 815**

Time :- 2:30 hours

Type of Question	Marks	Number	Description	Total Marks
Objective Questions	1	15	6 Multiple Choice Questions, 3 Fill in the Blanks Questions, 3 One Word Answer Type Questions, 3 Assertion-Reason Questions	15
Very Short Answer Type Question	2	6	Internal choice will be given in any 2 questions	12
Short Answer Type Question	3	6	Internal choice will be given in any 2 questions	18
Essay Answer Type Question	5	3	Internal options will be given in all the questions	15
Total		30		60