JHARKHAND Rai University RANCHI

PRACTICE SET

End Semester (3rd Sem.) Examination, December -2025

Program: B. Sc. (Hons.) Agriculture

Semester: 3rd

Course: Production Technology for Vegetables and Spices

Course Code: 13A.213

Course outcome:

At the end of the course, the students will be able to

CO1 Demonstrate knowledge of the cultivation practices and management techniques for major vegetable and spice crops.

CO2 Identify various vegetable and spice crops and their seeds accurately.

CO3 Acquire practical skills in raising nurseries, fertilization, and harvesting of vegetable and spice crops.

CO4 Demonstrate competence in application of post-harvest handling techniques for vegetable and spice crops.

Unit / Module-1

Short Answer Questions: 5 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
1.	Define olericulture and explain its importance in human nutrition.	Remember	CO1
2.	Explain the steps involved in nursery raising and transplanting of tomato.	Understand	CO3
3.	Illustrate the classification of vegetables based on plant parts used as food.	Apply	CO2
4.	List the major Solanaceous vegetables cultivated in India and their economic significance.	Remember	CO1
5.	Identify the physiological disorders in tomato and suggest their preventive measures.	Apply	CO4

Long Answer Questions: 15 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
6.	Assess the economic significance of vegetable production in India and its role in national nutrition security.	Evaluate	CO1
7.	Critically analyze how improved hybrid varieties and production technologies have transformed productivity in cucurbits.	Analyze	CO2
8.	Analyze how temperature and soil moisture influence fruit set, ripening, and yield in tomato and brinjal crops.	Analyze	CO1

9.	Evaluate the comparative advantages of protected cultivation versus open-field cultivation for high-value vegetables like capsicum.	Evaluate	CO1
10.	Formulate a cropping sequence integrating vegetables and spices for maximizing resource use efficiency.	Create	CO3

Unit / Module-2

Short Answer Questions: 5 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
11.	Discuss the harvesting indices and curing methods followed for bulb crops.	Apply	CO4
12.	List the major varieties of cabbage recommended for rabi and kharif seasons.	Remember	CO2
13.	Illustrate the nursery raising and transplanting techniques used in cabbage and cauliflower.	Apply	CO3
14.	Identify the physiological disorders affecting cauliflower curd formation and their management.	Apply	CO4
15.	Recall the recommended seed rate and bulb set size for onion cultivation.	Remember	CO2

Long Answer Questions: 15 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
16.	Assess the contribution of cole crops to the Indian vegetable export economy.	Evaluate	CO1
17.	Formulate a package of practices for organic cultivation of onion and garlic emphasizing soil health management.	Create	CO2
18.	Examine the major pest and disease complexes affecting bulb crops and suggest an integrated management strategy.	Evaluate	CO3
19.	Analyze the effect of temperature fluctuations on bolting and button formation in cabbage and cauliflower.	Analyze	CO4
20.	Compare the cultivation techniques, maturity periods, and yield performance among cabbage and cauliflower.	Analyze	CO2

Unit / Module-3

Short Answer Questions: 5 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
21.	Illustrate the fertilizer and irrigation practices essential for optimum root development in radish.	Apply	CO3
22.	List the recommended varieties of carrot and radish grown in tropical and temperate regions.	Remember	CO2

23.	Identify the common physiological disorders of carrot (any two) and explain preventive measures.	Apply	CO3
24.	Recall the improved potato varieties suitable for early and late seasons in India.	Remember	CO4
25.	Discuss the proper stage of harvesting and storage techniques used for carrot and potato.	Apply	CO2

Long Answer Questions: 15 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
26.	Examine the causes of physiological disorders such as pithiness in radish and black heart in potato, suggesting corrective measures.	Evaluate	CO1
27.	Compare the production technology and yield potential of carrot and radish under varying climatic conditions.	Analyze	CO2
28.	Analyze how soil texture and temperature influence root formation and pigment development in carrot and beetroot.	Analyze	CO3
29.	Develop a nutrient and irrigation management plan for maximizing yield and starch content in potato.	Create	CO4
30.	Evaluate the economic importance of root crops in promoting nutrition security and rural employment.	Evaluate	CO2

Unit / Module-4

Short Answer Questions: 5 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
31.	List the major spice-growing states of India and their climatic requirements.	Remember	CO2
32.	Define *spice crops* and explain their role in Indian cuisine and export trade.	Remember	CO1
33.	Define leafy vegetables and mention their importance in human nutrition.	Remember	CO1
34.	Demonstrate the post-harvest handling and packaging techniques for leafy vegetables to maintain freshness.	Apply	CO4
35.	Summarize the propagation and planting techniques of drumstick (moringa).	Understand	CO3

Long Answer Questions: 15 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
36.	Examine the impact of pest and disease infestations on yield losses in leafy and perennial vegetables and suggest integrated solutions.	Evaluate	CO4
37.	Formulate a package of practices for integrated nutrient management in leafy vegetables using organic amendments.	Create	CO3

38.	Assess the economic potential of curry leaf and drumstick as commercial perennial vegetables.	Evaluate	CO1
39.	Develop a crop rotation plan involving leafy vegetables to enhance soil fertility and sustainability.	Create	CO4
40.	Evaluate the role of value addition and processing in enhancing the marketability of leafy and perennial vegetables.	Evaluate	CO1

Summary Sheet:

CO Wise

CO	Q. No.	Marks
CO1	1,4,6,8,9,16,26,32,33,38,40	125
CO2	3,7,12,15,17,20,22,25,27,30,31	105
CO3	2,10,13,18,21,23,28,35,37	85
CO4	5,11,14,19,24,29,34,36,39	85
Total		**400**

Unit Wise

Unit	Q. No.	Marks
Unit I	1-10	100
Unit II	11-20	100
Unit III	21-30	100
Unit IV	31-40	100
Total		**400**

Bloom's Taxonomy Level (BLT) Wise

BLT	Q. No.	Marks
LOT	1,2,3,4,5,11,12,13,14,15,21,22,23,24,25,31,32,33,34,35	100
HOT	6,7,8,9,10,16,17,18,19,20,26,27,28,29,30,36,37,38,39,40	300
Total		**400**

Prepared By: Dr. Neha G. A. Kisku **Reviewed By: Dr. Neeta Shweta Kerketta**

Disclaimer: - This is a practice set. The Question in End semester examination will differ from the practice set. This practice set is meant for practice only.