JHARKHAND Rai University
RANCHI

PRACTICE SET

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

Program: B. Sc. (Hons.) Agriculture **Semester: 3rd**

Course: Agri-Informatics **Course Code: 13A. 211**

Course outcome:

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

CO1 Understand analogy of computer

CO2 Basic knowledge of MS Office

CO3 Some basic knowledge of Internet and WWW

CO4 Use of IT application and different IT tools in Agriculture & Use of Decision support systems, Agriculture Expert System and Soil Information

Unit / Module-1

Short Answer Questions: 5 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
1.	Define word processor. Name the applications in MS Office for document creation and editing.	Remember	CO1
2.	State the definition of operating system and list the various types of OS.	Remember	CO1
3.	Elaborate the concept of data presentation. Name the various data presentation schemes.	Understand	CO1
4.	Explain the term database with suitable example. List few major database applications.	Understand	CO1
5.	Explain how DBMS is different from traditional file system? Illustrate the use of DBMS in agriculture.	Understand	CO1

Long Answer Questions: 15 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
6.	Explain the basic functional units of a computer system with suitable diagram. Discuss the evolution of computers from the first generation to the present age.	Analyze	CO1
7.	Explain the features of MS Word for document creation. Discuss the uses of Microsoft Excel in data analysis and manipulation.	Analyze	CO1
8.	Explain the importance of effective data presentation. Discuss the various steps involved in creating and interpreting graphs.	Analyze	CO1
9.	Support the utilization of database management systems in agricultural practices. Highlight the benefits of implementing DBMS in managing agricultural data.	Evaluate	CO1

10.	Enumerate five functions of operating system. Give the view of OS as Resource Manager.	Analyze	CO1

Unit / Module-2

Short Answer Questions: 5 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
11.	Compare Web page, Web site &Web browser.	Understand	CO2
12.	Sketch a flowchart to find the largest one among three integers input by the user.	Apply	CO2
13.	Discuss e-Agriculture and its key concepts.	Understand	CO2
14.	Outline the ICT (Information and Communication Technology) benefits of agriculture.	Understand	CO2
15.	Describe how World Wide Web facilitate information access?	Remember	CO2

Long Answer Questions: 15 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
16.	Critically evaluate the evolution and history of the World Wide Web and assess the main components of this global information system including web browsers, servers, and URLs.	Evaluate	CO2
17.	Design a conceptual framework illustrating different programming language levels contribute to software development.	Create	CO2
18.	Analyze the role of Information and Communication Technology (ICT) in agriculture. Propose innovative ICT applications in crop monitoring, pest control, and market information systems.	Analyze	CO2
19.	Evaluate the effectiveness of e-Agriculture and its significance in modern farming practices. Explore the applications of e-Agriculture in areas like precision farming and farm management.	Evaluate	CO2
20.	a. Critically assess the impact of major internet services on global communication and data access. Integrate and justify how standard input/output operations enhance the reliability of programming.	Evaluate	CO2

Unit / Module-3

Short Answer Questions: 5 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
11.	Define computer models in agriculture and mention two	Remember	CO3

	examples used for simulating crop growth.		
12.	Explain how IT-based tools help in calculating crop water requirement with an example.	Understand	CO3
13.	List the major types of automated systems used in agri-input management and their main function.	Remember	CO3
14.	Write short notes on any two smartphone applications that provide agricultural advisories to farmers in India.	Apply	CO3
15.	What is geospatial technology? Briefly explain its role in generating agricultural information.	Understand	CO3

Long Answer Questions: 15 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
16.	Discuss the role of computer simulation models in understanding plant physiological processes and predicting crop yield under different climatic and management conditions. Give suitable examples.	Analyzing	CO3
17.	Evaluate various IT-based decision support systems used for determining irrigation and nutrient requirements of crops. Explain how these tools enhance resource use efficiency and sustainability.	Evaluating	CO3
18.	Describe in detail the working principles and components of computer-controlled automated systems for agri-input management. Explain their significance in precision farming.	Analyzing	CO3
19.	Examine the impact of smartphone-based applications on modern agricultural extension and farm decision-making. Highlight their advantages and limitations in rural India.	Evaluating	CO3
20.	Geospatial technology has revolutionized agricultural monitoring and planning." Discuss this statement with reference to remote sensing, GIS, and GPS applications in Indian agriculture	Create	CO3

Unit / Module-4

Short Answer Questions: 5 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
21.	Define Decision Support System (DSS) and mention its main components.	Remember	CO4
22.	Differentiate between Decision Support Systems and Expert Systems in agriculture.	Understand	CO4
23.	What is a Soil Information System? Mention its importance in farm-level decision-making.	Understand	CO4
24.	List the major IT tools used for preparing contingent crop plans under aberrant weather conditions.	Apply	CO4

25.	Write a short note on the role of Expert Systems in pest and disease management.	Apply	CO4

Long Answer Questions: 15 Marks questions

Sl. No.	Model Questions	Bloom Taxonomy	CO
26.	Explain the concept, architecture, and working of Decision Support Systems (DSS) in agriculture. Discuss their role in improving strategic and tactical farm decisions.	Analyze	CO4
27.	Analyze the structure and functioning of Agricultural Expert Systems. How do they integrate artificial intelligence and knowledge-based reasoning for advisory services?	Analyze	CO4
28.	Discuss the development, structure, and applications of Soil Information Systems in land evaluation, fertility mapping, and sustainable resource management.	Analyze	CO4
29.	Evaluate the use of IT tools and models in preparing contingent crop plans for drought-prone or flood-affected regions. Support your answer with suitable examples from India.	Evaluate	CO4
30.	Design an integrated framework combining DSS, Expert Systems, and Soil Information Systems for supporting precision farming and climate-resilient agriculture.	Create	CO4

Summary Sheet:

CO Wise

CO	Q. No.	Marks
CO1	1-10	100
CO2	11-20	100
CO3	11-20	100
CO4	21-30	100
		400

Unit Wise

Unit	Q. No.	Marks
Unit I	1-10	100
Unit II	11-20	100
Unit III	100	
Unit IV	100	

Bloom's Taxonomy Level (BLT) Wise

BLT	Q. No.	Marks
LOT		
HOT		
Total		**300**

Prepared By: Rojalin Hota/ Rajan Kr. Tiwari **Reviewed By:**

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.