JHARKHAND Rai University
RANCHI

End Semester/Reappear (Semester IV) Examination May 2025

Programme:B. Sc. (Hons.) Agriculture

Course:Farming System & Sustainable Agriculture **Full Marks: 50**

Course Code: 13A.264 **Time: 2 Hrs.**

Enrolment no. _____

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks
	Section I			
1	**Short Answer type questions.**			**4 x 5 = 20**
a	Differentiate between cropping pattern and cropping system with suitable examples.	CO1	Understand	
	or			
	Summarise the importance of a farming system in sustainable agriculture.	CO1	Remember	
b	**Describe** the **major challenges and problems** associated with the implementation of sustainable agriculture in India.	CO1	Remember	
	or			
	Explain the advantages of the Green Revolution, highlighting its contributions to food security and agricultural productivity.	CO1	Remember	
c	Identify the major components of an Integrated Farming System (IFS).	CO2	Remember	
	or			
	Summarize the essential characteristics of a well-designed Integrated Farming System (IFS) model.	CO2	Understand	
d	Describe how nutrient use efficiency can be increased.	CO2	Remember	
	or			
	Define Water Use Efficiency (WUE).	CO2	Remember	
	Section II			
Long Answer type questions.				**2 x 15 = 30**
2	a. Conclude which system of poultry rearing is advantageous among cage and deep litter systems?	CO1	Analyze	10
	b. List the key advantages of integrating crop production with livestock production.	CO1	Remember	5
	or			
	a. Discuss how apiculture plays a major role in the farming system and analyze which species of honey bee rearing will be economical for Indian condition and why?	CO1	Analyze	10
	b. Differentiate between relay cropping and multilayered cropping.	CO1	Understand	5
3	a.Write a critical appraisal on the constraints for adopting conservation agriculture.	CO2	Evaluate	10
	b.Differentiate between the Low External Input Agriculture (LEIA) and Low External Input and Sustainable Agriculture (LEISA) techniques.	CO2	Understand	5
	or			
	a. State about Conservation Agriculture. Explain the principles and advantages of conservation agriculture.	CO2	Analyze	10
	b.Explain the advantages of Low External Input Sustainable Agriculture (LEISA).	CO2	Remember	5

Course Outcome:

CO1 Understand the basic concepts, components and principles of farming systems and objectives of sustainable agriculture.
CO2 Know the sustainability of integrated farming system and resource use efficiency and optimization techniques.