

**SRM VALLIAMMAI ENGINEERING COLLEGE**  
(An Autonomous Institution)

SRM Nagar-Kattankulathur –603203

**DEPARTMENT OF AGRICULTURE ENGINEERING**

**QUESTIONBANK**



**V SEMESTER**

**PAG501 – INTEGRATED FARMING SYSTEM**

**Regulation – 2023**

**Academic Year 2025 –2026**

*Prepared by*

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## UNIT-I: INTRODUCTION OF FARMING SYSTEM

Farming system – introduction – scope of farming system – importance – concept – principles of farming system - Types of farming systems – Advantages and limitations- suitability – factors affecting the farming system

Q.NO	QUESTIONS PART-A	BTLEVEL	COMPETENCE
1.	What is meant by a farming system?	BT-1	Remembering
2.	Mention any two components of the farming system.	BT-2	Understanding
3.	State one importance of a farming system.	BT-1	Remembering
4.	What is the basic concept of a farming system?	BT-2	Understanding
5.	Name any one principle of the farming system.	BT-1	Remembering
6.	Mention two types of farming systems.	BT-4	Analyzing
7.	Give one advantage of the farming system.	BT-2	Understanding
8.	State one limitation of the farming system.	BT-1	Remembering
9.	Name one factor that determines the suitability of a farming system.	BT-4	Analyzing
10.	Mention any two factors that affect a farming system.	BT-3	Applying
11.	Define integrated farming system.	BT-1	Remembering
12.	What is meant by mixed farming?	BT-3	Applying
13.	Differentiate between subsistence farming and commercial farming.	BT-2	Understanding
14.	What is crop rotation in a farming system?	BT-1	Remembering
15.	Mention any two objectives of a farming system.	BT-4	Analyzing
16.	What is the role of livestock in a farming system?	BT-5	Evaluating
17.	What do you understand by sustainable agriculture?	BT-2	Understanding
18.	How does a farming system help in employment generation?	BT-4	Analyzing
19.	Mention any two features of organic farming.	BT-2	Understanding
20.	What is the significance of resource recycling in farming systems?	BT-4	Analyzing
21.	Name two examples of allied enterprises in a farming system.	BT-3	Applying
22.	What is the role of agroforestry in farming systems?	BT-6	Creating
23.	Mention two benefits of integrating poultry in farming systems.	BT-3	Applying

24.	What is the difference between monocropping and intercropping?	BT-1	Remembering
25.	How does climate affect the choice of a farming system?	BT-2	Understanding
<b>Q.NO</b>	<b>QUESTIONS PART-B</b>	<b>BTLEVEL</b>	<b>COMPETENCE</b>
1.	Explain the concept and components of a farming system.	BT-2	Understanding
2.	Discuss the scope of the farming system in modern agriculture.	BT-1	Remembering
3.	Write an essay on the importance of farming systems for sustainable agriculture.	BT-5	Evaluating
4.	Describe the principles of a farming system with suitable examples.	BT-3	Applying
5.	Explain the various types of farming systems practiced in India.	BT-5	Evaluating
6.	Compare and contrast integrated farming systems and conventional farming.	BT-6	Creating
7.	Discuss the advantages and limitations of different farming systems.	BT-1	Remembering
8.	Explain how the suitability of a farming system is determined in a particular region.	BT-5	Evaluating
9.	Describe the factors affecting the selection of a farming system.	BT-4	Analyzing
10.	Elaborate on the role of integrated farming systems in improving farmers' income.	BT-4	Analyzing
11.	Discuss how farming systems contribute to natural resource conservation.	BT-2	Understanding
12.	Explain the importance of crop-livestock integration in a farming system.	BT-3	Applying
13.	Describe how climate and soil influence the choice of a farming system.	BT-2	Understanding
14.	Write a detailed note on organic farming as a type of farming system.	BT-1	Remembering
15.	Discuss the role of government policies and support systems in the adoption of farming systems.	BT-3	Applying
16.	Explain the economic and environmental benefits of sustainable farming systems.	BT-1	Remembering
17.	Describe the concept of diversification in farming systems and its importance.	BT-1	Remembering

## UNIT-II: INTEGRATED FARMING SYSTEM

Integrated farming system-historical background - objectives and characteristics advantages of IFS — Components of IFS - Integrated Farming System in Wetland — IFS in garden land — IFS in dryland and fallow land.

<b>Q.NO</b>	<b>QUESTIONS PART-A</b>	<b>BTLEVEL</b>	<b>COMPETENCE</b>
1.	What is meant by Integrated Farming System (IFS)?	BT-1	Remembering
2.	Mention two main objectives of IFS.	BT-4	Analyzing
3.	State any two characteristics of Integrated Farming System.	BT-1	Remembering

4.	What is the historical background of the Integrated Farming System in India?	BT-1	Remembering
5.	Name two components commonly found in an IFS model.	BT-4	Analyzing
6.	Give any two examples of livestock used in IFS.	BT-5	Evaluating
7.	What is the importance of recycling in IFS?	BT-2	Understanding
8.	Mention two advantages of adopting an Integrated Farming System.	BT-3	Applying
9.	What are the major components of IFS in wetland areas?	BT-3	Applying
10.	List two benefits of IFS in garden land.	BT-3	Applying
11.	Name any two components of IFS suitable for dryland farming.	BT-1	Remembering
12.	How does IFS help in income stability?	BT-1	Remembering
13.	What role does poultry play in an Integrated Farming System?	BT-1	Remembering
14.	Mention any two allied enterprises commonly integrated in IFS.	BT-4	Analyzing
15.	What is the significance of fish farming in IFS?	BT-2	Understanding
16.	How does IFS help in environmental sustainability?	BT-2	Understanding
17.	Name two suitable crop combinations for wetland-based IFS.	BT-1	Remembering
18.	What is the role of horticulture in garden land IFS?	BT-4	Analyzing
19.	Give two advantages of using biogas in an Integrated Farming System.	BT-2	Understanding
20.	State any two limitations of IFS.	BT-4	Analyzing
21.	What are the major components of IFS in fallow lands?	BT-1	Remembering
22.	How does IFS promote efficient resource utilization?	BT-4	Analyzing
23.	Mention two factors to be considered when designing an IFS model.	BT-6	Creating
24.	How can IFS contribute to employment generation?	BT-2	Understanding
25.	Name two government schemes that support IFS implementation in India.	BT-1	Remembering
<b>Q.NO</b>	<b>QUESTIONS PART-B</b>	<b>BTLEVEL</b>	<b>COMPETENCE</b>
1.	Explain the historical background and evolution of the Integrated Farming System in India.	BT-4	Analyzing
2.	Discuss the main objectives and characteristics of the Integrated Farming System.	BT-5	Evaluating
3.	Write an essay on the advantages and disadvantages of the Integrated Farming System.	BT-5	Evaluating
4.	Describe the major components of an Integrated Farming System with suitable examples.	BT-4	Analyzing

5.	Explain the importance of resource recycling in an Integrated Farming System.	BT-4	Analyzing
6.	Elaborate on the role of Integrated Farming Systems in improving farm income and livelihood security.	BT-1	Remembering
7.	Discuss how IFS contributes to sustainable agricultural development.	BT-6	Creating
8.	Describe the structure and functioning of an Integrated Farming System in wetland areas.	BT-5	Evaluating
9.	Explain the different components used in IFS models for garden land.	BT-2	Understanding
10.	Describe the design and implementation of IFS in dryland and fallow land regions.	BT-1	Remembering
11.	How does Integrated Farming System help in improving soil health and fertility?	BT-2	Understanding
12.	Discuss the role of livestock in an Integrated Farming System.	BT-2	Understanding
13.	Write an essay on the integration of crop and fish farming in wetland IFS.	BT-3	Applying
14.	How can horticulture be effectively included in an IFS for garden land areas?	BT-3	Applying
15.	Explain how IFS can help in addressing the challenges of dryland farming.	BT-4	Analyzing
16.	What are the economic and environmental benefits of adopting an Integrated Farming System?	BT-5	Evaluating
17.	Compare and contrast the IFS models used in wetland, garden land, and dryland.	BT-6	Creating

### UNIT-III: LIVESTOCK PRODUCTION IN IFS

IFS With Goats and Sheep – housing and feeding management – deworming – Young stock management - Dairy Farming in IFS - Fodder production in IFS - IFS With poultry rearing – Duck farming – Rabbit farming – Piggery

Q.NO	QUESTIONS PART-A	BTLEVEL	COMPETENCE
1.	What are the advantages of integrating goats and sheep in an IFS?	BT-1	Remembering
2.	Mention two common housing requirements for goats in an IFS model.	BT-2	Understanding
3.	State two important points in feeding management of sheep.	BT-1	Remembering
4.	Why is deworming important in goat and sheep farming?	BT-4	Analyzing
5.	At what age should deworming begin for young goats or lambs?	BT-4	Analyzing
6.	What is meant by young stock management in small ruminants?	BT-2	Understanding
7.	Name two practices included in the care of young goats or lambs.	BT-2	Understanding
8.	What are two benefits of dairy farming in an Integrated Farming System?	BT-4	Analyzing
9.	List two important criteria for selecting dairy animals for IFS.	BT-1	Remembering

10.	Name two breeds commonly used for dairy farming in India.	BT-5	Evaluating
11.	Mention two fodder crops suitable for IFS.	BT-2	Understanding
12.	What is the importance of green fodder in IFS-based dairy units?	BT-4	Analyzing
13.	State two advantages of cultivating fodder crops in an IFS.	BT-1	Remembering
14.	How does poultry rearing benefit small and marginal farmers in IFS?	BT-1	Remembering
15.	Name two popular breeds used in poultry farming in India.	BT-1	Remembering
16.	Mention two housing requirements for backyard poultry in IFS.	BT-3	Applying
17.	What is the role of duck farming in wetland-based IFS?	BT-2	Understanding
18.	List two benefits of integrating duck farming in an IFS.	BT-1	Remembering
19.	Name two duck breeds suitable for egg or meat production.	BT-4	Analyzing
20.	What are the feeding essentials for ducks in IFS?	BT-4	Analyzing
21.	Mention two advantages of rabbit farming in an IFS.	BT-1	Remembering
22.	Name two common rabbit breeds used for meat production.	BT-3	Applying
23.	State two housing considerations for rabbit rearing.	BT-3	Applying
24.	What are the benefits of integrating piggery in an IFS model?	BT-2	Understanding
25.	Name two local or exotic pig breeds suitable for rearing in India.	BT-1	Remembering
<b>Q.NO</b>	<b>QUESTIONS PART-B</b>	<b>BTLEVEL</b>	<b>COMPETENCE</b>
1.	Explain the role of goats and sheep in an Integrated Farming System.	BT-5	Evaluating
2.	Describe the housing and feeding management practices for goats and sheep in IFS.	BT-5	Evaluating
3.	Discuss the importance and procedure of deworming in small ruminants under IFS.	BT-4	Analyzing
4.	Write an essay on young stock management for goats and sheep in integrated farms.	BT-6	Creating
5.	Explain how dairy farming contributes to the sustainability of an Integrated Farming System.	BT-3	Applying
6.	Describe the integration of fodder production in IFS and its benefits to livestock units.	BT-4	Analyzing
7.	Explain the various types of fodder crops suitable for IFS and their management.	BT-6	Creating
8.	Discuss the importance of balanced feeding and nutrient management in dairy farming within IFS.	BT-5	Evaluating
9.	Explain how poultry farming can be integrated into IFS for small and marginal farmers.	BT-4	Analyzing
10.	Describe the housing, feeding, and disease management practices for poultry in IFS.	BT-4	Analyzing

11.	Write an essay on the benefits and management of duck farming in wetland-based IFS.	BT-2	Understanding
12.	Compare and contrast poultry farming and duck farming as components of IFS.	BT-4	Analyzing
13.	Discuss rabbit farming as a profitable enterprise under Integrated Farming Systems.	BT-3	Applying
14.	Describe the housing and feeding requirements of rabbits in IFS.	BT-2	Understanding
15.	Explain the scope and management practices of piggery under an Integrated Farming System.	BT-6	Creating
16.	Discuss the integration of multiple livestock components (goats, poultry, dairy, pigs) in a single IFS model.	BT-4	Analyzing
17.	How does livestock integration in IFS contribute to nutrient cycling and waste management?	BT-6	Creating

#### UNIT-IV: IFS COMPONENTS

Agroforestry – definition – types of agroforestry system – benefits of agroforestry

system– Aquaculture – Fish cum agriculture and horticulture – Beekeeping and cast of bees – care and management in beekeeping – Sericulture - Mulberry cultivation – Silkworm rearing – Organic farming – Azolla – Small scale nursery.

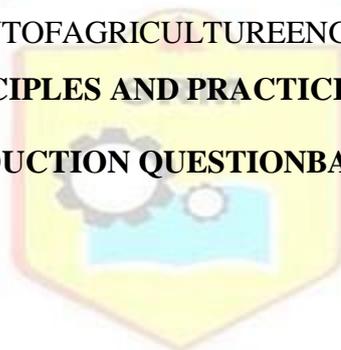
Q.NO	QUESTIONS PART-A	BTLEVEL	COMPETENCE
1.	What is agroforestry?	BT-1	Remembering
2.	Mention any two types of agroforestry systems.	BT-1	Remembering
3.	Give two examples of tree species used in agroforestry.	BT-2	Understanding
4.	State two benefits of agroforestry systems.	BT-4	Analyzing
5.	Differentiate between agrosilviculture and silvopastoral systems.	BT-4	Analyzing
6.	What is aquaculture?	BT-1	Remembering
7.	Name two common fish species used in aquaculture.	BT-4	Analyzing
8.	What is meant by fish cum agriculture?	BT-2	Understanding
9.	Mention two advantages of integrating fish farming with horticulture.	BT-2	Understanding
10.	State two key requirements for successful aquaculture.	BT-2	Understanding
11.	Define beekeeping.	BT-4	Analyzing
12.	Mention two commonly used species of honey bees.	BT-1	Remembering
13.	State two by-products obtained from beekeeping.	BT-3	Applying
14.	Name two important management practices in beekeeping.	BT-4	Analyzing
15.	What are two benefits of keeping bees in an agricultural system?	BT-2	Understanding

16.	What is sericulture?	BT-2	Understanding
17.	Mention any two uses of silk.	BT-4	Analyzing
18.	Name two important steps in silkworm rearing.	BT-5	Evaluating
19.	What is the ideal temperature range for rearing silkworms?	BT-2	Understand
20.	Name two common silkworm breeds used in India.	BT-1	Remembering
21.	Name two suitable varieties of mulberry for silkworm rearing.	BT-1	Remembering
22.	What is Azolla?	BT-2	Understanding
23.	Mention two benefits of Azolla in farming systems.	BT-5	Evaluating
24.	Name two uses of mulberry in sericulture.	BT-1	Remembering
25.	What are the key conditions required for Azolla cultivation?	BT-4	Analyzing
<b>Q.NO</b>	<b>QUESTIONS PART-B</b>	<b>BTLEVEL</b>	<b>COMPETENCE</b>
1.	Define agroforestry and discuss its importance in sustainable agriculture.	BT-5	Evaluating
2.	Explain the different types of agroforestry systems with suitable examples.	BT-1	Remembering
3.	Discuss the ecological and economic benefits of agroforestry systems.	BT-2	Understanding
4.	Describe the integration of aquaculture with agriculture and horticulture.	BT-2	Understanding
5.	Explain the key factors to be considered for successful fish farming in integrated systems.	BT-4	Analyzing
6.	Discuss the importance of beekeeping in agriculture and list the common species of bees used.	BT-1	Remembering
7.	Describe the care and management practices necessary for maintaining healthy bee colonies.	BT-2	Understanding
8.	Explain the process of sericulture and its significance in rural economies.	BT-3	Applying
9.	Discuss the cultivation practices of mulberry for silkworm rearing.	BT-5	Evaluating
10.	Describe the lifecycle and rearing techniques of silkworms in sericulture.	BT-5	Evaluating
11.	Explain the principles and practices of organic farming.	BT-4	Analyzing
12.	Discuss the role of Azolla as a biofertilizer and its benefits in farming systems.	BT-4	Analyzing
13.	Describe the methods of Azolla cultivation and its management.	BT-4	Analyzing
14.	Explain the importance of small-scale nurseries in horticulture and agriculture.	BT-1	Remembering
15.	Discuss the advantages and challenges of integrating aquaculture with agriculture.	BT-3	Applying
16.	Explain the contribution of beekeeping to biodiversity and crop production.	BT-5	Evaluating

17.	Describe the role of organic farming in enhancing soil health and productivity.	BT-4	Analyzing
<b>UNIT-V: RESOURCE RECYCLING IN IFS</b>			
Resource recycling in wetland IFS - Resource flow in crop + dairy + biogas + spawn + silviculture In IFS - Biogas production through IFS — Resource recycling in crop + goat IFS - Uses and features of biogas - Structure and function of Dheenabandhu Gas plant - Vermicompost - Preparation of vermicompost from farm residue —Mushroom production in IFS.			
<b>Q.NO</b>	<b>QUESTIONS PART-A</b>	<b>BTLEVEL</b>	<b>COMPETENCE</b>
1.	What is resource recycling in wetland Integrated Farming System (IFS)?	BT-1	Remembering
2.	Mention two benefits of resource recycling in IFS.	BT-3	Applying
3.	Explain the resource flow concept in crop + dairy + biogas + spawn + silviculture system.	BT-2	Understanding
4.	What role does biogas play in an Integrated Farming System?	BT-2	Understand
5.	Name two raw materials used for biogas production in IFS.	BT-6	Creating
6.	What is vermicompost?	BT-6	Creating
7.	Mention two features of vermicompost.	BT-4	Analyzing
8.	List two farm residues suitable for vermicompost preparation.	BT-2	Understanding
9.	Describe one method of preparing vermicompost from farm residues.	BT-4	Analyzing
10.	What are the uses of biogas in farming systems?	BT-4	Analyzing
11.	State two features of biogas as an energy source.	BT-1	Remembering
12.	What is the Dheenabandhu gas plant?	BT-2	Understanding
13.	Describe the structure of the Dheenabandhu gas plant.	BT-2	Understanding
14.	Mention one key function of the Dheenabandhu gas plant in IFS.	BT-6	Creating
15.	Explain resource recycling in crop + goat integrated farming system.	BT-2	Understanding
16.	Name two advantages of integrating goat farming with crop cultivation.	BT-2	Understanding
17.	What is mushroom production in the context of IFS?	BT-1	Remembering
18.	Mention two benefits of mushroom cultivation in IFS.	BT-4	Analyzing
19.	What types of spawn are commonly used in mushroom production?	BT-4	Analyzing
20.	How does biogas slurry help in resource recycling within IFS?	BT-2	Understanding
21.	Name two nutrients recycled through biogas slurry in the farm.	BT-5	Evaluating
22.	State one environmental benefit of resource recycling in IFS.	BT-1	Remembering
23.	What is the significance of integrating silviculture in IFS?	BT-2	Understanding

24.	Mention two inputs required for efficient biogas production.	BT-4	Analyzing
25.	How does mushroom cultivation contribute to farm income in IFS?	BT-1	Remembering
<b>Q.NO</b>	<b>QUESTIONS PART-B</b>	<b>BTLEVEL</b>	<b>COMPETENCE</b>
1.	Explain the concept of resource recycling in wetland Integrated Farming Systems.	BT-5	Evaluating
2.	Discuss the resource flow in a combined crop, dairy, biogas, spawn, and silviculture system in IFS.	BT-4	Analyzing
3.	Describe the process and benefits of biogas production in an Integrated Farming System.	BT-1	Remembering
4.	Explain the role of resource recycling in crop + goat integrated farming systems.	BT-2	Understanding
5.	Discuss the uses and features of biogas as an energy source in farming.	BT-2	Understanding
6.	Describe the structure and working of the Dheenabandhu gas plant in detail.	BT-4	Analyzing
7.	Explain the importance of vermicomposting in sustainable agriculture.	BT-5	Evaluating
8.	Describe the step-by-step preparation of vermicompost from farm residues.	BT-2	Understanding
9.	Discuss the significance of mushroom production in Integrated Farming Systems.	BT-3	Applying
10.	Explain how resource recycling improves productivity and sustainability in IFS.	BT-2	Understanding
11.	Describe the integration of dairy and biogas units in an IFS and their mutual benefits.	BT-5	Evaluating
12.	Discuss the nutrient recycling benefits of biogas slurry in farming systems.	BT-5	Evaluating
13.	Explain the contribution of silviculture to resource recycling in IFS.	BT-4	Analyzing
14.	Describe the management practices for successful mushroom cultivation in IFS.	BT-1	Remembering
15.	Discuss the environmental benefits of resource recycling in wetland farming systems.	BT-5	Evaluating
16.	Explain the advantages of integrating goat farming with crop cultivation in IFS.	BT-2	Understanding
17.	Describe the design and operation principles of the Dheenabandhu gas plant.	BT-3	Applying

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S.No	UnitNo		BT1	BT2	BT3	BT4	BT5	BT6	Total Questions
1	Unit-1	PartA	7	7	4	5	1	1	25
		PartB	3	3	2	2	3	1	14
		PartC	1	-	1	1	1	-	4
2	Unit-2	PartA	9	5	3	6	1	1	25
		PartB	2	2	2	3	4	1	14
		PartC	1	-	-	1	1	1	4
3	Unit-3	PartA	8	7	3	6	1	0	25
		PartB	0	2	2	5	3	2	14
		PartC	0	1	0	1	0	2	4
4	Unit-4	PartA	7	8	1	7	2	0	25
		PartB	3	3	1	4	3	0	14
		PartC	0	1	1	1	1	0	4
5	Unit-5	PartA	5	9	1	6	1	3	25
		PartB	2	4	1	3	4	0	14
		PartC	0	1	1	1	1	0	4

**TOTAL NO.OF QUESTIONS IN EACH PART**

PART A-125 PART B – 70 PART C – 20

**TOTAL= 215**