

Total No. of Questions: 6

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Enrollment No.....



**Faculty of Agriculture**  
**End Sem Examination May-2024**  
**AG3CO31 Farming system & sustainable Agriculture**  
Programme: B.Sc. (Hons.)    Branch/Specialisation: Agriculture

**Duration: 3 Hrs.**

**Maximum Marks: 50**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

- Q.1 i. Who introduced farming system? **1**  
(a) African (b) Egyptian (c) Austrian (d) European
- ii. Main aim of specialized farming system is- **1**  
(a) Maximum productivity (b) Maximum input use  
(c) Soil health maintenance (d) All of these
- iii. The yearly sequence and spatial arrangement of crops or of crops and fallow on a given area is called- **1**  
(a) Cropping pattern (b) Cropping system  
(c) Crop Rotation (d) None of these
- iv. Which cropping system is having largest area in India? **1**  
(a) Rice-Wheat (b) Wheat-Rice  
(c) Rice-Rice-Rice (d) Rice-Oilseeds
- v. Which is not an element of sustainable agriculture? **1**  
(a) Agro-forestry  
(b) Crop rotation  
(c) Permaculture  
(d) Permanent use of pesticides in farming
- vi. Which is not an objective of sustainable agriculture? **1**  
(a) Maintaining a healthy environment  
(b) Economic profitability  
(c) Higher crop production  
(d) Social and economic equity
- vii. Cropping system which involves the raising of crops, animals and or trees is called- **1**  
(a) Mixed farming (b) Intercropping  
(c) Multiple cropping (d) All of these

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- viii. Activity area of farming system is- **1**  
(a) Database analysis (b) On station research  
(c) On-farm researches (d) All of these
- ix. Integrated farming system improves- **1**  
(a) Farm income  
(b) Family labour employment  
(c) Nutritional security of family  
(d) All of these
- x. Average cropping intensity in India is- **1**  
(a) 100 % (b) 90% (c) 136% (d) 180%
- Q.2 i. Define farming system. **1**  
ii. Write the concept of farming system. **2**  
iii. Explain components of farming system. **5**  
OR iv. Explain importance and scope of farming system. **5**
- Q.3 i. What is cropping pattern? **1**  
ii. Write the difference between cropping system and cropping pattern. **3**  
iii. Explain multiple cropping systems. **4**  
OR iv. Explain efficient cropping system and their evaluation. **4**
- Q.4 i. What is LEISA? **2**  
ii. Explain conservation agriculture strategies in agriculture. **6**  
OR iii. Write the impact of sustainable agriculture on agriculture. **6**
- Q.5 i. Define integrated farming system. **2**  
ii. Write brief historical background of integrated farming system. **2**  
iii. Discuss the IFS model for different agro-climatic zones of Madhya Pradesh. **4**  
OR iv. Why there is a need of integrated farming system in Indian agriculture? **4**
- Q.6 Attempt any two: **4**  
i. Explain resource use efficiency and optimization techniques in agriculture. **4**  
ii. Discuss resource cycling and flow of energy in different farming system. **4**  
iii. Explain characteristics of good integrated farming system model. **4**

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P.T.O.

## Marking Scheme

### AG3CO31- Farming System & Sustainable Agriculture

Q.1	i)	<b>(b) Egyptian</b>	<b>1</b>
	ii)	Main aim of specialized farming system is. <b>(a) Maximum productivity</b>	<b>1</b>
	iii)	The yearly sequence and spatial arrangement of crops or of crops and fallow on a given area is called. <b>(a) Cropping patterns</b>	<b>1</b>
	iv)	Which cropping system is having largest area in India? <b>(a) Rice-Wheat</b>	<b>1</b>
	v)	Which is not an element of sustainable agriculture? <b>(d) Permanent use of pesticides in farming.</b>	<b>1</b>
	vi)	Which is not an objective of sustainable agriculture? <b>(c) Higher crop production</b>	<b>1</b>
	vii)	Cropping system which involves the raising of crops, animals and or trees is called. <b>(a) Mixed farming</b>	<b>1</b>
	viii)	Activity area of farming system is. <b>(d) All of these</b>	<b>1</b>
	ix)	Integrated farming system improves. <b>(d) All of these</b>	<b>1</b>
	x)	Cropping intensity in India is. <b>(c) 136%</b>	<b>1</b>
Q.2	i.	Define Farming System.	<b>1</b>
	ii.	Write the concept of farming system.	<b>2</b>
	iii.	Explain components of Farming System. Any five points	<b>5</b>
OR	iv.	Explain importance and scope of farming system. Importance scope	<b>5</b> <b>2.5</b> <b>2.5</b>
Q.3	i.	What is cropping pattern.	<b>1</b>
	ii.	Write the difference between cropping system and cropping pattern.	<b>3</b>

		Any Three points.	
	iii.	Explain multiple cropping systems.	<b>4</b>
OR	iv.	Explain efficient cropping system and their evaluation.	<b>4</b>
Q.4	i.	What is LEISA.	<b>2</b>
	ii.	Explain Conservation agriculture strategies in agriculture. Any six points.	<b>6</b>
OR	iii.	Write the impact of Sustainable Agriculture on agriculture. Any six points.	<b>6</b>
Q.5	i.	Define Integrated farming system.	<b>2</b>
	ii.	Write brief historical background, of Integrated farming system.	<b>2</b>
	iii.	Discuss the IFS model for different agro-climatic zones of Madhya Pradesh.	<b>4</b>
OR	iv.	Why need of integrated farming system in Indian agriculture. Any four points.	<b>4</b>
Q.6	i.	Explain Resource use efficiency and optimization techniques in agriculture. Any four points.	<b>4</b>
	ii.	Discuss Resource cycling and flow of energy in different farming system. Any four points.	<b>4</b>
	iii.	Explain characteristics of good integrated farming system model. Any four points.	<b>4</b>