



# Faculty of Agriculture

## End Semester Examination May 2025

### AG3CO31 Farming system & sustainable Agriculture

<b>Programme</b>	: B. Sc. (Hons.)	<b>Branch/Specialisation</b>	: AG
<b>Duration</b>	: 3 hours	<b>Maximum Marks</b>	: 50

**Note:** All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary. Notations and symbols have their usual meaning.

#### Section 1 (Answer all question(s))

Marks CO BL

**Q1.** Diversified farming system is also known as:

1 1 1

Rubric	Marks
Integrated farming ,	1

- ☐ Organic farming
 ☐ Specialized farming  
☒ Integrated farming
 ☐ None of these

**Q2.** Main objective of farming system is \_\_\_\_\_.

1 1 2

Rubric	Marks
Maximum productivity.	1

- ☒ Maximum productivity
 ☐ Maximum input use  
☐ Soil health maintenance
 ☐ All of these

**Q3.** The yearly sequence and spatial arrangement of crops and fallow on a given area is called \_\_\_\_\_.

1 2 2

Rubric	Marks
Cropping pattern	1

- ☐ Cropping system
 ☒ Cropping pattern  
☐ Crop rotation
 ☐ None of these

**Q4.** Growing two or more crops on the same field in a year is called \_\_\_\_\_.

1 2 2

Rubric	Marks
Multiple cropping	1

- ☐ Mixed cropping
 ☒ Multiple cropping  
☐ Monocropping
 ☐ None of these

**Q5.** The full form of HEIA is \_\_\_\_\_.

1 3 1

Rubric	Marks
High External Input Agriculture	1

- ☒ High External Input Agriculture
 ☐ High Extreme Input Agriculture  
☐ Highest Extreme Input Agriculture
 ☐ None of these

**Q6.** Which one of the following is not an element of sustainable agriculture?

1 3 2

Rubric	Marks
Use of pesticides in farming	1

- ☐ Crop rotation
 ☐ Agro-forestry  
☐ Pisciculture
 ☒ Use of pesticides in farming

**Q7.** Which one of the following objectives favors Benefit-Cost ratio?

1 4 2

Rubric	Marks
Profitability	1

- ☐ High Input use efficiency
 ☐ Cash flow round the year  
☒ Profitability
 ☐ Productivity

**Q8.** Cropping system which involves raising of crops, animals and / or trees is called \_\_\_\_\_ .:

1 4 2

Rubric	Marks
Mixed farming	1

- ☒ Mixed farming
 ☐ Intercropping  
☐ Multiple cropping
 ☐ All of these

**Q9.** Integrated farming system improves \_\_\_\_\_.

1 5 2

Rubric	Marks
All of these	1

- ☐ Farm income
 ☐ Family labour employment  
☐ Nutritional security of family
 ☒ All of these

**Q10.** Cropping intensity in India is \_\_\_\_\_ ..

1 5 2

Rubric	Marks
141%	1

- ☐ 120 %
 ☐ 100%  
☒ 141%
 ☐ 200%

## Section 2 (Answer all question(s))

Marks CO BL

**Q11.** What is farming system?

2 1 2

Rubric	Marks
Meaning of Farming System.	2

**Q12. (a)** Write the scope and importance of farming system.

6 1 2

Rubric	Marks
the scope of farming system.	3
the importance of farming system.	3

(OR)

**(b)** Describe the factors affecting the types of farming.

Rubric	Marks
Each factor affecting the types of farming carries -1- mark .	6

**Section 3 (Answer any 2 question(s))**

Marks CO BL

**Q13.** Write definitions of cropping pattern and cropping system.

4 2 2

Rubric	Marks
Definition of cropping pattern .	2
Definition of Cropping System.	2

**Q14.** Explain with examples multiple cropping system.

4 2 2

Rubric	Marks
multiple cropping systems with examples.	4

**Q15.** Write about important evaluation tools used in cropping and farming systems.

4 2 2

Rubric	Marks
tools in cropping and farming system	4

**Section 4 (Answer all question(s))**

Marks CO BL

**Q16.** What is HEIA?

2 3 2

Rubric	Marks
Definition and full form of HEIA.	2

**Q17. (a)** Explain conservation agriculture strategies.

6 3 2

Rubric	Marks
Conservation agriculture strategies in agriculture.	6

(OR)

**(b)** Write the impact of sustainable agriculture on agriculture.

Rubric	Marks
the impact of Sustainable Agriculture on agriculture.	6

**Section 5 (Answer all question(s))**

Marks CO BL

**Q18.** Define integrated farming system.

1 4 1

Rubric	Marks
Definition of Integrated farming system.	1

**Q19.** Write principles of conservation agriculture.

2 4 2

Rubric	Marks
principles of conservation agriculture.	2

**Q20. (a)** Discuss IFS models suitable for different agro-climatic zones of Madhya Pradesh.

5 4 2

Rubric	Marks
the IFS model for different agro-climatic zones of Madhya Pradesh.	5

(OR)

**(b)** Write about different components of Integrated farming system.

Rubric	Marks
components of Integrated farming system.	5

**Section 6 (Answer any 2 question(s))**

Marks CO BL

**Q21.** Explain resource use efficiency and optimization techniques in agriculture.

4 5 2

Rubric	Marks
Resource use efficiency and optimization techniques in agriculture.	4

**Q22.** Describe resource cycling and flow of energy in different farming systems.

4 5 2

Rubric	Marks
Resource cycling and flow of energy in different farming systems	4

**Q23.** Write the characteristics of good integrated farming system model.

4 5 2

Rubric	Marks
the characteristics of good integrated farming system model.	4

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