

**B.Sc. (Honours) Agriculture Semester-IV Examination, 2019**

**Course No: AGR-222 (Farming System and Sustainable Agriculture)**

Signature of Centre Superintendent

**Roll No. :** (in figure) \_\_\_\_\_ (in words) \_\_\_\_\_

Student Index No. \_\_\_\_\_ Regn. No. \_\_\_\_\_ of \_\_\_\_\_

**Time : 2.5 Hours**

**Full marks : 60**

Questions are of value as indicated in the margin

**Part - I**  
**(Objective and Short Answer Type)**  
**(Use only ball point pen)**

**Time : 30 minutes**

**Full marks : 20**

- Note:** 1. Answer in question paper itself.  
2. Striking, rewriting or overwriting are not allowed in the objective type questions.

1. **Tick (✓) the correct alternatives:** 1×10=10
- 1) One crop variety grown alone in pure stand at normal density is called as  
a) Sole crop b) Main crop c) Mono crop d) Base crop
  - 2) The process of growing two or more crops in sequence on the same field in a year is termed as  
a) Mixed cropping b) Inter cropping c) Sequential cropping d) Multiple cropping
  - 3) The single most important farming enterprise is  
a) Cropping d) Dairy c) Fishery d) Forestry
  - 4) Arable farming is one that concentrates on  
a) Growing and harvesting of crops b) Rearing of animals c) Both growing of crops and rearing of animals d) Gathering foods from the forest
  - 5) Which one of the farming activities can be done without any land?  
a) Piggery b) Poultry c) Bee keeping d) Fishery
  - 6) Paddy straw is the major input for the cultivation of  
a) Vegetables b) Mushroom c) Fish d) Flower
  7. Dominant farming system components in India are  
a) Crop + Dairy b) Crop + Fishery c) Fishery+Poultry d) Fishery+Piggery
  - 8) An example of Low External Input Agriculture is a) Protected Agriculture b) Organic Farming  
c) Agri-silviculture d) Dairy Farming
  - 9) The kind of development that meets the needs of the present without compromising the ability of future generations to meet their own needs has been defined as sustainable development by  
a) FAO b) WCED c) CGIAR d) ICAR
  - 10) Which one can be considered as an 'on farm' input?  
a) Chemical fertilizer b) Seeds of hybrids c) Botanical pesticides d) Micronutrient formulations

(2)

2. **Briefly explain the following (any five) :**

2×5=10

a) Cropping pattern

b) Composite fish culture

c) Cropping Intensity Index

d) Cultivated Land Utilization Index

e) Apiculture – its role in IFS

f) Sustainable Yield Index

g) Biogas plant

**B.Sc. (Honours) Agriculture Examination, 2019**

**Semester-IV**

**Course No: AGR-222**

**(Farming System and Sustainable Agriculture)**

**Part - II**  
**(Descriptive Type)**

**Time : 2 Hours**

**Full marks : 40**

Questions are of value as indicated in the margin

**Answer any four questions**

3. Write short notes on the following (**any four**) : 2.5×4=10
- a) Crop rotation
  - b) Resource cycling in IFS
  - c) Indicators of Sustainable Agriculture
  - d) Dairy Farming
  - e) Tayanga farming
4. Differentiate between (**any four**) : 2.5×4=10
- a) Faring system and cropping system
  - b) Mixed cropping and inter cropping
  - c) 'Shifting' cultivation and 'zabo' cultivation
  - d) HEIA and LEIA
  - e) Rainfed farming and irrigated farming
5. Define farming system. Explain different factors affecting type of farming. Discuss about importance and maintenance of goatery in farming system. 2+4+4=10
6. What is IFS? Explain objectives, characteristics, components and advantages of IFS. 2+(2+2+2+2)=10
7. Define multiple cropping. What are pre-requisites for multiple cropping? Explain any two parameters for the evaluation of an intercropping system. 2+(4+4)=10
8. Define cropping system. What are the different types of cropping system? Explain *paira* cropping, ratoon cropping and parallel multiple cropping with examples. 2+2+(2+2+2)=10
9. What do you mean by LEISA? Describe any four LEISA techniques for sustainability. 2+(2×4)=10
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