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Programme – B.Sc.(Ag)-Hons-2021/B.Sc.(Ag)-Hons-2023

Course Code - CC-BAG402

(Semester IV)

Time : 2:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

(Multiple Choice Type Question)

$$1 \times 20 = 20$$

1. Choose the correct alternative from the following :

- (i) Show the correct option: Farm in which no enterprise is contributing to 50% or more income is called asfarming
 - a) Specialized
 - b) Diversified
 - c) mixed
 - d) commercialized
- (ii) Show the correct option: Combination of crop with rearing of livestock where more than 10% of its gross income must be from livestock activity is called as _____ farming
 - a) Specialized
 - b) Diversified
 - c) mixed
 - d) commercialized
- (iii) Show the correct option: Sustainable agriculture is derives from word
 - a) Greek
 - b) Latin
 - c) Italic
 - d) none of the above
- (iv) Show the correct option: The practice of growing different crops of varying height, rooting pattern and duration is called as.....
 - a) multi-storied cropping
 - b) multi-tier cropping
 - c) Both of these
 - d) None of these
- (v) Show the correct option: Energy output (MJ/ ha) / energy input (MJ/ ha) is called as
 - a) Energy efficiency
 - b) Energy productivity
 - c) Energy intensity
 - d) Net energy
- (vi) Show the correct option: Ratio between marketable crop yield and water used by the crop in evapotranspiration.
 - a) Crop WUE
 - b) WUE
 - c) Fertiliser use efficiency
 - d) none of the above
- (vii) Show the correct option: Which is a renewable source of energy?
 - a) Wind power.
 - b) Petroleum.
 - c) Forest.
 - d) All of the above.

- (viii) Show the correct option: Yearly sequence and spatial arrangement of crops or crops and fallow on a given area is called

 - Cropping pattern
 - crop rotation
 - cropping system
 - None of these

(ix) Show the correct option: Which is the basic requirement for intercropping

 - Peak nutrient demand of main and intercrops should not coincide
 - Must be complementary
 - Maturity period must have at least 30 days interval
 - All of these

(x) Show the correct option: The rainfall/irrigation facility is limited to only 6-8 months, the possible cropping system is

 - Upland crop-Rice-Upland crop
 - Rice-Rice-Upland crops
 - Rice-Upland crop-Rice
 - All of these

(xi) Show the correct option: Under irrigated upland condition, where the winter is mild, the cropping systems followed is

 - Rice-Upland crops
 - Upland crops-Rice
 - None of these
 - Both a and b

(xii) Show the correct option: Which is the alternate crop to rice in rabi season both in command and well irrigated areas of South India

 - Sunflower
 - Groundnut
 - Wheat
 - Sugarcane

(xiii) Show the correct option: Predominant wheat based cropping system in western and central India is

 - Pigeon pea-Wheat
 - Pearl millet-Wheat
 - Soybean-wheat
 - All of these

(xiv) Show the correct option: Intercropping will increase the light interception of _____%

 - 10-20
 - 20-30
 - 30-40
 - >50

(xv) Show the correct option: Growing legumes is advantageous because

 - Fix atmospheric N
 - Extract insoluble soil P
 - Absorb more divalent cations (Ca^{2+} , Mg^{2+})
 - All of these

(xvi) Show the correct option: What is the objective of proposing indices in cropping systems

 - Assessing benefit of intercropping system
 - Relative performance of intercrops
 - Both a and b
 - None of these

(xvii) Show the correct option: Judicious mix of one or more enterprises with cropping is called

 - Cropping system
 - Farming system
 - Both a and b
 - None of these

(xviii) Show the correct option: Which of the following can be combined with fish for increasing profit and utilizing resources effectively

 - Duck
 - Pig
 - Poultry
 - All of these

(xix) Show the correct option: Activity area of farming system is

 - Database analysis
 - On station research
 - On-farm research
 - All of these

(xx) Show the correct option: Which is the most important characteristic of sustainable farming

 - Ecological harmony
 - Use of chemical fertilizers
 - Balanced input
 - All of these

Group-B

(Short Answer Type Questions)

2. Explain Crop equivalent Yield. (2.5)
3. Explain Fertilizer use efficiency. (2.5)
4. Explain the term Sustainable Agriculture. (2.5)
5. Explain the Disadvantages of Sustainable Agriculture. (2.5)
6. Discuss about carbon sequestration. (2.5)
7. Simplify the term carbon foot print. (2.5)
8. Explain Conventional Agriculture. (2.5)
9. Explain the term Farming system. (2.5)
10. Explain the term sole cropping. (2.5)
11. Explain the term Shifting cultivation. (2.5)

OR

Explain the term Land Equivalent Ratio. (2.5)

Group-C

(Long Answer Type Questions)

5 x 1=5

12. Categorize the benefits of Crop rotation. (5)

OR

Categorize the limitations of Conservation Agriculture. (5)
