School of Agriculture
Master of Science in Agronomy
Mid Term Examination - Nov 2023

Duration : 90 Minutes
Max Marks : 50

Sem I - A1PB103B - Conservation Agriculture

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1) Discuss the importance of sustainability in agriculture. — K2 (2)

2) Describe the historical background of Conservation Agriculture — K1 (3)

3) Evaluate the social and economic implications of adopting Conservation Agriculture. — K2 (4)

4) Assess the role of technology and innovation in advancing Conservation Agriculture practices. — K2 (6)

5) Analyze the global experiences with Conservation Agriculture adoption and its impact on various regions. Compare the adoption rates and challenges faced by countries with diverse agricultural landscapes. Identify common factors that contribute to successful adoption and those that hinder it. — K3 (6)

6) Conduct a comprehensive comparative analysis of Conservation Agriculture adoption in two distinct regions: one with a predominantly arid climate and another with a humid climate. Evaluate the factors influencing adoption rates, the specific challenges faced in each region, and the unique benefits of Conservation Agriculture in addressing their respective environmental and agricultural concerns. — K3 (9)

7) You have been commissioned to conduct an environmental impact assessment of a Conservation Agriculture system compared to a traditional Conventional Agriculture system. Analyze and provide a comprehensive report on the environmental benefits and drawbacks of both systems, focusing on aspects such as soil health, water quality, and biodiversity. — K4 (8)

8)   Select a specific region or farm that has successfully transitioned to Conservation Agriculture practices. Conduct a comprehensive case study, including detailed data collection and analysis, to assess the long-term ecological, economic, and social impacts. Highlight the key lessons learned and best practices from this case study.

K4 (12)

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OR

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Develop an integrated pest management strategy for a Conservation Agriculture system that focuses on reducing the use of chemical pesticides while maintaining high crop yields. Incorporate biological control methods, crop rotation, and habitat management into your strategy. Explain how this strategy aligns with the sustainability goals of Conservation Agriculture

K4 (12)