



AGRICULTURE

Time Allowed: 03 hours.

Max: Marks: 100

NOTE : i) Attempt only FIVE questions.

ii) Extra attempt of any question or any part will not be considered.

- Q.1 Climate change is serious threat to future agriculture and scientists need to shift their priorities accordingly. Narrate the role of agronomists and plant breeders for setting new research goals. (20)
- Q.2 What are the main causes of low crop production and profit per unit area in Pakistan? Discuss specific measures by which the objective of maximization of crop production and good profit can be achieved. (20)
- Q.3 Discuss the perspective of integrated pest management in enhancing the crop productivity in the country. (20)
- Q.4 Biotechnology has been around for twenty years. Why has not it increased crop yields significantly in all that time? In your opinion, can biotechnological techniques assist in meeting the food requirements of growing population and how? (20)
- Q.5 Horticultural crops have better potential than major cash/food crops. Discuss how these can be better exploited for the betterment of farming community? (20)
- Q.6 How are the soil and crop productivity affected by water logging? Suggest methods of prevention to enhance agricultural production. (20)
- Q.7 Differentiate between any four of the following. (20)
- Back cross and test cross
 - C₃ and C₄ plants
 - Saline soils and saline sodic soils
 - Gram blight and gram wilt
 - Sericulture and silviculture
 - Monococious and dioecious plants
- Q.8 Write short notes on any four of the following. (20)
- Agroforestry
 - Bacillus thuringiensis*
 - Hybrid vigour
 - Fusarium wilt*
 - Post harvest losses in fruits
 - Allelopathy