

AGRICULTURE

Time Allowed: 03 Hours

Max: Marks: 100

NOTE: i) Attempt ONLY FIVE questions in all.  
ii) All questions carry EQUAL marks.  
iii) Extra attempt of any question or any part will not be considered.  
iv) Candidate must draw two straight lines (— — —) at the end to separate each question in answer book.

- Q.1. Give a running account of agricultural research in the country and its impact on crop productivity.
- Q.2. a) Highlight the significance of genetic resources regarding food security.  
b) Elaborate the possibilities of another green revolution to meet the food requirements of increasing population.
- Q.3. Salinity and water logging are the twin menace in irrigated agriculture. Describe the causes of these two threats and also discuss the reclamation procedures for saline sodic soils.
- Q.4. Low productivity due to biotic and abiotic stresses is a matter of great concern. Describe the role of 'IPM' to overcome the biotic stresses affecting agricultural production.
- Q.5. Write down the reasons of stagnant yields of wheat crop in Pakistan. Suggest appropriate strategies to bridge the gap between existing yields and the potential yields.
- Q.6. Write short notes on any FOUR of the following.  
a) Livestock as a component of Agriculture  
b) Rust diseases in wheat  
c) Green House Effects  
d) Crop water use efficiency  
e) Polyploidy  
f) Potential of Horticultural industry in the country
- Q.7. Differentiate between any FOUR of the following  
i. Basic seed and certified seed  
ii. Symbiotic and non symbiotic nitrogen fixation  
iii. C<sub>3</sub> and C<sub>4</sub> plants  
iv. Vertical resistance and Horizontal resistance  
v. Pomes and stone fruits  
vi. Linkage and crossing.