

PUNJAB PUBLIC SERVICE COMMISSION
COMBINED COMPETITIVE EXAMINATION FOR
RECRUITMENT TO THE POSTS OF
PROVINCIAL MANAGEMENT SERVICE, ETC - 2016
SUBJECT: AGRICULTURE (PAPER-II)

TIME ALLOWED: THREE HOURS

MAXIMUM MARKS: 100

NOTE: **Attempt FIVE Questions In All.**

- ✓ **Q No. 1:** Explain the concept of modern plant breeding. Discuss how modern breeding techniques may help improve the crop productivity under the ecological conditions of Pakistan.
(20 Marks)
- ✓ **Q No. 2:** The genetic purity of a crop variety usually declines after few years of production cycles. Describe different factors responsible for this decline and suggest strategies to maintain genetic purity.
(20 Marks)
- Q No. 3:** Cotton production in the Punjab province was quite low during last year. What were the principal factors responsible for that? Suggest measures for improving the cotton production in Punjab.
(20 Marks)
- Q No. 4:** Pakistan has to spend huge amount of valuable foreign exchange on the import of edible oil. What are the principal factors responsible for low production of oilseeds in the country? Suggest measures and options to increase the production of oilseeds in Pakistan.
(20 Marks)
- ✓ **Q No. 5:** Pakistani soils are inherently low in organic matter. Describe its causes. Propose some pragmatic strategies for improving the soil organic matter.
(20 Marks)
- Q No. 6:** What are problem soils? Describe the management practices for harvesting profitable crop production on saline and saline-sodic soils.
(20 Marks)
- Q No. 7:** What is precision agriculture? Discuss the applications of GIS and remote sensing in commercial agriculture.
(20 Marks)
- ✓ **Q No. 8:** How far is it true that yield of a crop is a function of the inter-play of the crop genetics, environmental conditions and management practices? Critically analyze.
(20 Marks)
- ✓ **Q No. 9:** Write short notes on the following:- **(5x4=20 Marks)**
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| (i). Cotton Leaf Curl Virus | (ii). Green Revolution |
| (iii). Integrated Pest-management | (iv). Food Security |
| (v). Water Harvesting | |