



PUNJAB PUBLIC SERVICE COMMISSION
COMBINED COMPETITIVE EXAMINATION
FOR RECRUITMENT TO THE POSTS OF
PROVINCIAL MANAGEMENT SERVICE - 2020

SUBJECT: AGRICULTURE (PAPER-I)

TIME ALLOWED: THREE HOURS

MAXIMUM MARKS: 100

NOTE:

- i. All the parts (if any) of each Question must be attempted at one place instead of at different places.
- ii. Write Q. No. in the Answer Book in accordance with Q. No. in the Q. Paper.
- iii. No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
- iv. Extra attempt of any question or any part of the question will not be considered.

Attempt FIVE Questions in All. Attempt in Urdu or English.

- Q. No. 1:** Pakistan is blessed with land, perennial rivers, four seasons, biologically diverse natural resources and enormous work force. Elucidate the causes of less efficient and irrational utilization of these resources in our system. Recommend appropriate measures for efficient and sustainable utilization of these resources to increase agricultural productivity and mobilize stagnant economy. **(10+10 = 20 Marks)**
- Q. No. 2:** Narrate types of damages caused by weeds. Explain the impact of chemical weed control on environment, animals and human health. Describe integrated weed management system. **(5+6+9 = 20 Marks)**
- Q. No. 3:** Agricultural extension services can play a crucial role in boosting agricultural productivity, increasing food security, improving rural livelihoods, and promoting agriculture as an engine of pro-poor economic growth. Comment on the statement. Design steps to make these services more effective for increasing agricultural productivity, food security and improving rural livelihoods in our Punjab. **(10+10 = 20 Marks)**
- Q. No. 4:** Pakistan's vast farm lands are sustained by Indus Basin Irrigation System and country's economy is largely based on its agricultural produce. Water is a crucial resource for its sustained economic development. Water scarcity and over-exploitation of water resources make it difficult to maintain the system. Throw light on the challenges of water scarcity and its over-exploitation in the changing climatic scenario of Pakistan. What could be possible short term and long term solutions in this regard? **(10+10 = 20 Marks)**
- Q. No. 5:** a) Food produced especially fruits and vegetables are wasted due to negligence and lack of *processing* facilities in our country. How can we improve our agro food processing facilities to check food wastage and enhance export of these products?
b) What are different types of food contaminations? How do you identify food contamination? Narrate the steps to prevent food contamination and hazards related to food contamination. **(10+10=20 Marks)**
- Q. No. 6:** What are the major problems of different stake holders engaged in agriculture sector of Pakistan? Discuss measures to address these problems. **(10+10 = 20 Marks)**
- Q. No. 7:** Explain role and contribution of IT in agriculture at global level. What are the advantages of Precision Agriculture? Suggest measures for our farming community to benefit from IT for enhancing production and efficient resource utilization. **(6+6+8 = 20 Marks)**
- Q. No. 8:** *Pakistan* in general and the province of Punjab in particular have a narrow forest resource. Elaborate importance and factors upsetting agroforestry system in Punjab. Propose suitable measures and practices for adoption of agroforestry based system for the province. **(10+10 = 20 Marks)**



PUNJAB PUBLIC SERVICE COMMISSION

COMBINED COMPETITIVE EXAMINATION FOR RECRUITMENT TO THE POSTS OF PROVINCIAL MANAGEMENT SERVICE -2020

SUBJECT: AGRICULTURE (PAPER-II)

TIME ALLOWED: THREE HOURS

MAXIMUM MARKS: 100

NOTE:

- i. All the parts (if any) of each Question must be attempted at one place instead of at different places.
- ii. Write Q. No. in the Answer Book in accordance with Q. No. in the Q. Paper.
- iii. No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
- iv. Extra attempt of any question or any part of the question will not be considered.

Attempt FIVE Questions in All. Attempt in Urdu or English.

- Q.No.1:** What are the types of waterlogged soils? Give different factors responsible for their formation and also suggest appropriate strategies for their control. **(20 Marks)**
- Q.No.2:** Describe the general symptoms of bacterial and viral plant diseases; also give the principles of their control in detail. **(20 Marks)**
- Q.No.3:** Define soil organic matter; give its sources, composition and decomposition mechanism in soils. Describe in detail the roles of organic matter for improving soil productivity on sustained basis. **(20 Marks)**
- Q.No.4:** What is integrated nutrient management (INM)? What factors are considered important for integrated nutrient management for assuring sustainable crop production? **(20 Marks)**
- Q.No.5:** Canola is an important oil seed crop with low erucic acid and glucocinolate. What are the factors affecting quality of this crop. **(20 Marks)**
- Q.No.6:** What are the techniques of tissue culture to overcome the obstacles of conventional breeding for the improvement of crops? **(20 Marks)**
- Q.No.7:** What are the major management problems of important fruit crops in Pakistan? What propagation methods we can use for improving their fruit quality? **(20 Marks)**
- Q.No.8: Write short notes on the followings: (4x5=20 Marks)**
- i) Breeding methods for self, cross and asexually propagated crops
 - ii) Control of soil erosion
 - iii) Salt affected soils
 - iv) Major insect pests of sugarcane