

**KHYBER PAKHTUNKHWA PUBLIC SERVICE COMMISSION**  
**COMPETITIVE EXAMINATION FOR THE POSTS OF PMS-2018**

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2018

**Agriculture**

TIME ALLOWED: 03 HOURS

MAX: MARKS: 100

Note: i) Attempt any five (05) questions  
ii) Extra attempt of any question or any part will not be considered

- Q.1. Soil fertility is low in Pakistan. why? Give reasons and discuss how fertilizer use efficiency could be increased to improve soil fertility and get higher yields. (20)
- Q.2. What is sustainable agriculture? Elaborate the role of sustainable agriculture in food security in the changing climatic scenario. (20)
- Q.3. Climate change: A burning issue of today's agriculture. Elaborate in detail the negative and positive effects of climate change on agricultural productivity of Pakistan. (20)
- Q.4. There are some principles and elements of designs in landscape gardening, what are these? Describe each in detail in the present scenario of climate change. (20)
- Q.5. What are the main causes of post harvest losses in horticultural produce? Write in detail on how to minimize these losses to the minimum level? (20)
- Q.6. How do plant diseases/insects affect the quality and quantity of agricultural produces? Suggest general measures of plant diseases/insects control to improve the quality and quantity of these produces. (20)
- Q.7. Differentiate between the Agricultural Extension System of India and Pakistan. Explain the reasons that why India is a head of Pakistan with special regards to crop production/yield. Suggest measures to minimize the gape. (20)
- Q.8. Write short notes on any four (04) of the following: (20)
- i. Overview of biotic and a biotic stress resistance in plants
  - ii. Concept of bio-fertilizers and bio-pesticides
  - iii. Host resistance, its main types and their merits & demerits
  - iv. Bio-safety concerns and bio-ethics on GM crops
  - v. Improvement of plants via plant cell culture
  - vi. Events occurring in apoplast during plant pathogens interaction