

KHYBER PAKHTUNKHWA PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION FOR THE POSTS OF PMS-2022

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.No.1. Pakistan has been facing energy crisis and with ever increasing cost of electricity production it has become pivotal to find some alternate sources of it. Comment on the statement and support your answer with concrete examples. (20)

Q.No.2. Role of forests in mitigating the climate changes is well known fact. Describe the strategies that are already been adopted by other countries to increase the area under forests. (20)

Q.No.3. Productivity of major crops is majorly dependent upon soil conditions besides other intrinsic factors. Discuss how the soil structure can be improved to increase the per unit production of different crops? (20)

Q.No.4. Biotechnology has revolutionized the science of genetics by overcoming the barriers for introduction of foreign genes. Explain how genetic manipulation has resulted in improving the important plant traits quoting suitable examples? (20)

Q.No.5. Incidence of insects and disease attack on our major fruits like mango, apple and grapes is causing huge losses to farmers ultimately affecting our national exports. How modern breeding procedures can help farmers to overcome these issues? (20)

Q.No.6. Nitrogen fixing bacteria are key factors in helping the leguminous crops get higher yields besides enriching the soil. Explain the other new methods that have been employed by the scientists to help promote the nitrogen fixation. (20)

Q.No.7. Modern concept of precision agriculture has laid the foundation of major breakthrough in agricultural productivity. Suggest appropriate measures how these technologies can be used by resource poor farmers. (20)

Q.No.8. Write short notes on any four (04) of the followings: (20)

- i) Prospects of Crisper Case technology in Agriculture
- ii) Role of quality seed in crop production
- iii) Issues of hybrid seed production in wheat
- iv) Major threats to biodiversity
- v) Future of hydroponic system in Pakistan
- vi) Reasons for low cotton production in Pakistan

