

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

BOTANY PAPER-II

Time Allowed: 03 Hours

Maximum Marks: 100

Note: Attempt any five questions. Each question carries 20 marks.

Q 1	What is transpiration? Why it is important for plants? Describe the different types and mechanisms of transpiration.	20
Q 2	Describe different plant hormones (plant growth regulators) along with their functions in plants, and applications in agriculture and horticulture.	20
Q 3	Define and describe photoperiodism, vernalization, dormancy, and seed germination.	20
Q 4	Differentiate between the terms "food chain", "food web" with clear examples as well as explain trophic levels with focus on energy flow in the ecosystem.	20
Q 5	Describe salinity and water logging, their causes and consequences with special reference to Pakistan.	20
Q 6	Describe the ultra-structures and functions of five most important cell organelles.	20
Q 7	Write a comprehensive note on Mendel's findings in genetics. Also describe crossing over, genetic code and biochemical structure of hereditary material.	20
Q 8	Write a detailed note on the journey of Darwin that led to his theory of natural selection with remarks on the challenges faced by Neo-Darwinism.	20

PMS PAKHTUNKHWA
2022

