



FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION-2022
FOR RECRUITMENT TO POSTS IN BS-17
UNDER THE FEDERAL GOVERNMENT

Roll Number

BOTANY

TIME ALLOWED: THREE HOURS PART-I(MCQS): MAXIMUM 30 MINUTES	PART-I (MCQS) PART-II	MAXIMUM MARKS = 20 MAXIMUM MARKS = 80
NOTE: (i) Part-II is to be attempted on the separate Answer Book . (ii) Attempt ONLY FOUR questions from PART-II . ALL questions carry EQUAL marks. (iii) All the parts (if any) of each Question must be attempted at one place instead of at different places. (iv) Write Q. No. in the Answer Book in accordance with Q. No. in the Q.Paper. (v) No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed. (vi) Extra attempt of any question or any part of the question will not be considered.		

PART-II

- Q. No. 2.** Explain different types of algae based on cell structure, nature of the pigments and the types of reserve food materials. **(20)**
- Q. No. 3.** Discuss the economic importance and distribution of gymnosperms in Pakistan. **(20)**
- Q. No. 4.** Describe the pollination mechanisms in angiosperms. **(20)**
- Q. No. 5.** Shed light on the important rules of botanical nomenclature. **(20)**
- Q. No. 6.** Explain the role of different plant hormones from seed germination to fruit ripening. **(20)**
- Q. No. 7.** What are the adverse effects and control measures of aquatic and terrestrial pollution? Explain. **(20)**
- Q. No. 8.** Write notes on any **TWO** of the followings: **(10 each) (20)**
- (a)** Causes and mechanism of cell senescence
 - (b)** Importance of genetic engineering
 - (c)** Divergent Evolution
