



FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION-2023
FOR RECRUITMENT TO POSTS IN BS-17
UNDER THE FEDERAL GOVERNMENT

Roll Number

BOTANY

TIME ALLOWED: THREE HOURS	PART-I (MCQS)	MAXIMUM MARKS = 20
PART-I(MCQS): MAXIMUM 30 MINUTES	PART-II	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.** Write comprehensive notes on the following: **(10 each) (20)**
(a) Morphology of thallus in Algae
(b) Alternation of generation in Bryophytes
- Q. No. 3.** Describe significance of various types of abiotic environmental factors for soil formation. Give soil characteristics formed by each agent. **(20)**
- Q. No. 4.** Describe ultra-structure of nucleus with particular reference to nuclear membrane and pore complexes. **(20)**
- Q. No. 5.** Describe various types of environmental pollutions. Give significance of biodiversity and conservation to save the living planet. **(20)**
- Q. No. 6.** Give a diagrammatic account of location of the different photosystems in granum and briefly describe their functions in photosynthesis. **(20)**
- Q. No. 7.** What are different rules of botanical nomenclature? Compare natural and artificial system of classification. **(20)**
- Q. No. 8.** Write short notes on any **TWO** of the followings: **(10 each) (20)**
(a) Reproduction and economic importance of yeast
(b) Illustrative account of protein synthesis in eukaryotes
(c) Endosperm development in Angiosperms
