



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

Roll Number

BOTANY

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

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
