



**FEDERAL PUBLIC SERVICE COMMISSION
COMPETITIVE EXAMINATION-2017
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
<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) Candidate must 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 attempted question will not be considered.</p>		

PART-II

- Q. No. 2.** Describe briefly habitat, structure, reproduction and life cycle of adiantum. **(20)**
- Q. No. 3.** Discuss evolution of seed and its importance in vascular plants. **(20)**
- Q. No. 4.** Why is Darwin's theory of evolution still so controversial? Explain. **(20)**
- Q. No. 5.** How does the C₄ pathway differ from C₃ pathway of carbon fixation? What are the advantages and disadvantage of each pathway? **(20)**
- Q. No. 6.** How did the discovery that the DNA molecule is helical with uniform 2-nm diameter lead Watson and crick to propose the pairing rules for double-helix model? Explain. **(20)**
- Q. No. 7.** Describe causes and reclamation of soil salinity and water logging in Pakistan. **(20)**
- Q. No. 8.** Write short notes on any FOUR of the following: **(5 each) (20)**
- (a) Forensic Palynology.
 - (b) Chemo taxonomy.
 - (c) Imperfect Fungi.
 - (d) Chromosomal aberrations.
 - (e) Economic importance of Acacia Family.
