# FEDERAL PUBLIC SERVICE COMMISSION

## COMPETITIVE EXAMINATION FOR RECRUITMENT TO POSTS IN BS-17 UNDER THE FEDERAL GOVERNMENT, 2012

**Roll Number**

## BOTANY,PAPER-I

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|---|---|---|---|
| **TIME ALLOWED:** | **(PART-I MCQs)** | **30 MINUTES** | **MAXIMUM MARKS: 20** |
| **THREE HOURS** | **(PART-II)** | **2 HOURS & 30 MINUTES** | **MAXIMUM MARKS: 80** |

**NOTE**: **(i)** Candidate must write **Q.No.** in the **Answer Book** in accordance with **Q.No.** in the **Q.Paper**.
**(ii)** Attempt **ONLY FOUR** questions from **PART-II**. All questions carry **EQUAL** marks.
**(iii)** Extra attempt of any question or any part of the attempted question will not be considered.

## PART-II

**Q.2.** What are lichens? Give detail of their importance. **(20)**

**Q.3.** Differentiate between simple and complex tissue. **(20)**

**Q.4.** Give the classification and economic importance of main groups of Algae. **(20)**

**Q.5.** What is Numerical Taxonomy? Explain cladistic analysis. **(20)**

**Q.6.** What is fertilization? Explain different mode of seed dispersal in angiosperms. **(20)**

**Q.7.** Who proposed binomial nomenclature, give its detail. Why Latin is used in nomenclature? **(20)**

**Q.8.** Discuss the relation of Pteridophytes and gymnosperms. Highlight the advance characters of Pteridophytes with examples. **(20)**

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## BOTANY, PAPER-II

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|---|---|---|---|
| **TIME ALLOWED:** | **(PART-I MCQs)** | **30 MINUTES** | **MAXIMUM MARKS: 20** |
| **THREE HOURS** | **(PART-II)** | **2 HOURS & 30 MINUTES** | **MAXIMUM MARKS: 80** |

**NOTE**: **(i)** Candidate must write **Q. No.** in the **Answer Book** in accordance with **Q. No.** in the **Q. Paper.**
**(ii)** Attempt **ONLY FOUR** questions. **ALL** questions carry **EQUAL** marks.
**(iii)** Extra attempt of any question or any part of the attempted question will not be considered.

## PART-II

**Q. 2.** Explain Evolution with reference to Darwinism. **(20)**

**Q. 3.** Give detailed account of Chromosomal aberrations. Support your answer with diagrams. **(20)**

**Q. 4.** What is salanity and water logging? Discuss with reference to its causes in Pakistan. **(20)**

**Q. 5.** Which cell division occurs in reproductive cells? How diploid cell produce four heploid daughter cells? Explain. **(20)**

**Q. 6.** Describe the following: **(4x5=20)**
(a) Pyramids (b) Food chain (c) Ecological energetics
(d) Concepts of ecosystem

**Q. 7.** Write short notes on any **TWO** of the following:- **(2x10=20)**
1. Genetic code
2. Poly Ploidy
3. Mutation

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