



QUAID-I-AZAM UNIVERSITY ISLAMABAD

B.Sc. Annual Examinations--2013
(PART-I)

Roll No: _____

SUBJECT: **Botany**

PAPER: **A (Theory)**

June 25, 2013

SECTION-B AND C (SUBJECTIVE)

To be attempted in 2 hours and 35 minutes

Max Marks: 32

Note: Attempt any FOUR questions selecting TWO from each section below; draw neat and labelled diagram where required.

SECTION-B

(Virus, Bacteria, Algae and Fungi)

Q.No. 2.

- (a) Differentiate between Icosahedral symmetry and complex structure symmetry of viruses. (3)
- (b) Explain bacterial genetic recombination through conjugation method. (5)

Q.No. 3

What do you understand by Heteromorphic alteration of generation? Describe this phenomenon with reference to the life cycle of Laminaria. (8)

Q.No. 4

- (a) How Urdo spores are different from Teleutospores? (2)
- (b) Explain sexual reproduction in Aspergillus. (6)

Q.No. 5

- (a) Briefly describe successive stages during formation of Clamp connections in Basidiomycotina. (3)
- (b) Discuss the development and internal structure of Basidiocarp of Agaricus. (5)

SECTION- C

(Bryophyta, Pteridophyta and Spermatophyta)

Q.No. 6

- (a) Write the systematic position of Polytrichum. (2)
- (b) Describe Sporophyte of Polytrichum with labelled diagram. (6)

Q.No. 7

- (a) Explain the Stelar system in Equisetum with diagram. (4)
- (b) Discuss the structure and development of Archegonium in Equisetum with labelled diagram. (4)

Q No. 8

Write a detailed note on male and female Strobilus of Ephedra alongwith diagrams. (8)

Q No. 9

- (a) Describe morphology and internal structure of the Sporocarp of Marselia (6)
- (b) What are Elaters? Give their function. (2)