



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / First Semester – Spring 2022

Paper: Botany-I (Plant Diversity)

Course Code: BOT-101

Roll No.

Time: 3 Hrs. Marks: 60

THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Answer the following short questions:

(6x5=30)

1. Draw and explain the structure of Capsule of *Funaria*.
2. Draw life cycle of *Puccinia graminis*.
3. Draw and explain Plurilocular and Unilocular sporangia in *Ectocarpus*.
4. Explain Scalariform and Lateral conjugation in *Spirogyra*.
5. What are main characteristics of Centric & Pennate Diatoms.
6. Draw and describe canal system in *Equisetum* stem.

Q.2. Answer the following questions.

(3x10=30)

- i. Draw and describe life cycle of *Selaginella*.
- ii. Differentiate between Seed habit and Heterospory. How does Heterospory lead to Seed formation?
- iii. Draw and describe life cycle of smut fungi.