UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / First Semester - Spring 2023

Paper: Plant Diversity Course Code: BOT-107

Roll No	
Time: 3 Hrs.	

THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Answer the following short questions: (6x5=30)

- i. What is meant by alternation of generation? Explain it with the life cycle of Funaria.
- ii. Draw life cycle of rust fungi. Write a note on their economic importance.
- iii. Draw and Describe life cycle of *Ectocarpus*.
- İ۷. Describe evolutionary significance of Selaginella? How it is related to seed habit?
- Draw and describe structure and function of Globule and Nucule in Chara. ٧.
- Describe life cycle of SMUT fungi. Give economic importance of this group of fungal νi. pathogens.

Q.2. Answer the following questions.

- i. What are noteworthy features of gymnosperms? Why Ephedra plant is known as connecting link between angiosperms and gymnosperms? Explain? (10)
- ii. What are red algae? Describe triphasic life cycle of *Polysphonia* in detail. (10)
- iii. What are plant viruses? Write a note on their methods of reproduction. (5) a)
 - b) Draw and describe asexual and sexual reproduction in *Mucor*. (5)