Sr. No 325103

December 2023

B.Sc (Life Sciences)- I SEMESTER

Phycology and Mycology (NBLS-103)

Time: 3 Hours **Max. Marks:75**

Instructions:

1. *It is compulsory to answer all the questions (1.5 marks each) of Part -A in short.*
2. *Answer any four questions from Part -B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*
4. *Support your answer with relevant diagrams*

PART -A

Q1 (a) What is mycorrhiza? (1.5)

(b) Identify the key characters of algae. (1.5)

(c) What are the features of true fungi? (1.5)

(d) Draw the life cycle of *Vaucheria.* (1.5)

(e) Identify the different types of flagellation in algae. (1.5)

(f) What types of pigments are found in algae? (1.5)

(g) What are zoospores? Where are they found? (1.5)

(h) Describe six key characters of Ascomycotina. (1.5)

(i) Draw a well labelled diagram of *Polysiphonia.* (1.5)

(j) Define : dikaryon, hyphae, antheridium. (1.5)

PART -B

Q2 (a) Present the detailed classification of fungi. (10)

(b) Discuss the economic importance of algae. (5)

Q3 (a) Discuss the different parasitic and endophytic fungal interactions. (5)

(b) What are lichens? Describe their types, structure, and significance. (10)

Q4 Discuss in detail the different strategies used by fungi for reproduction. Support your answer with relevant examples and diagrams. (15)

Q5 (a) Give a comparative account of Mastigomycotina and Deuteromycotina. (5)

(b) Give a general account of reproduction in algae. (10)

Q6 (a) Describe the morphology, reproduction, and life cycle of *Chlamydomonas.* (10)

(b) Give a brief account of nutrition in fungi. (5)

Q7 Describe in detail the morphology, reproduction, and life cycle of *Puccinia.* (15)

****

325103/80/111/614