Name: **Enrolment No:**	

UPES
End Semester Examination, December 2023

Course: Mycology, Phycology and Protozoology **Semester: III**
Program: Int. BMSC & B.Sc. (Microbiology) **Duration : 3 Hours**
Course Code: HSMB 2011 **Max. Marks: 100**

Instructions: The Assessment consists of 4 sections.

- **Part A contains 20 questions of 1.5 marks each and all questions are compulsory.**
- **Part B consists of 4 questions of 5 marks each and all questions are compulsory.**
- **Part C consists of 2 questions of 15 marks each and all questions are compulsory.**
- **Part D consists of 2 questions of 10 marks each and all questions are compulsory.**

S. No.	**Section A** **Short answer questions/ MCQ/T&F** **(20Qx1.5M= 30 Marks)**	**Marks**	**COs**
Q 1	What is the vector of leishmaniasis? a. Tsetse fly b. Mosquito c. Sandfly d. Black fly	**1.5**	**CO1**
Q 2	Which of the following is a symptom of *Visceral leishmaniasis*? a. Skin ulcers b. Fever c. Cough d. Joint pain	**1.5**	**CO1**
Q 3	What is the causative agent of *Trichomoniasis*? a. Bacteria b. Fungus c. Parasite d. Virus	**1.5**	**CO1**
Q 4	All fungi are multicellular. State: True? False?	**1.5**	**CO3**
Q 5	How is *Entamoeba histolytica* transmitted? a. Through respiratory droplets b. Through skin contact c. Through ingestion of cysts d. Through sexual contact	**1.5**	**CO1**

Q 6	The most common site for amoebiasis is: a. Cecum b. Sigmoid colon c. Transverse colon d. Hepatic flexure	**1.5**	**CO1**
Q 7	How do malaria parasites spread?	**1.5**	**CO1**
Q 8	What does "parasitism" in symbiosis mean?	**1.5**	**CO2**
Q 9	What criteria are used to classify algae?	**1.5**	**CO2**
Q 10	Find the incorrect statement? a. Agar-agar is produced from Gracilaria b. Chlorella is used in space food c. Mannitol is a food reserve of Rhodophyceae d. Algin is produced by algae	**1.5**	**CO2**
Q 11	Which of the following is rich in protein? a. Ulothrix b. Spirogyra c. Nostoc d. Chlorella	**1.5**	**CO3**
Q 12	Microalgae can have certain effects on the human body, like hypersensitivity. True or False?	**1.5**	**CO3**
Q 13	Given are the favorable parameters for the growth of algae, except... a. Sufficient sunlight b. Moisture c. Sufficient nutrients d. Low pH	**1.5**	**CO3**
Q 14	Algae is classified based on..... a. Nature of food reserves b. Cell wall material c. Type of pigment d. All of the above	**1.5**	**CO2**
Q 15	Majorly, lichens are the pollution indicators of? a. CO b. Mercury c. NO2 d. SO2	**1.5**	**CO4**
Q 16	This about lichens is incorrect? a. Lichens are indicators of pollution b. They grow rapidly about 2cm every day c. Some species are eaten by reindeers d. They have symbiotic relationship	**1.5**	**CO4**
Q 17	Algal blooms result in? a. Global warming b. Salination c. Eutrophication d. Biomagnification	**1.5**	**CO2**

Q 18	The fungi, which derive their food directly from dead organic matter, are known as? a. Predators b. Decomposers c. Mutualists d. Parasitic fungi	**1.5**	**CO3**
Q 19	Which of the following is least likely to be present as a colonizer? a. *Candida* b. *Sporothrix* c. *Mucor* d. *Aspergillus*	**1.5**	**CO3**
Q 20	Can trichomoniasis be cured? a. No b. Yes	**1.5**	**CO1**
Section B (4Qx5M=20 Marks)			
Q 1	Explain the structure and life cycle of *Entamoeba histolytica* with the help of neat and labeled diagrams?	**5**	**CO1**
Q 2	Where does Leishmania live in the body? Can leishmaniasis cause death?	**3+2**	**CO2**
Q 3	Where is diatom found? What is the biological name of Spirogyra?	**2+3**	**CO3**
Q 4	What do you mean by phylogeny? Is ontogeny related to phylogeny?	**3+2**	**CO4**
Section C (2Qx15M=30 Marks)			
Q 1	Discuss the following economic importance of fungus: a. Economic Importance of Fungi in Medicine b. Economic Importance of Fungi in Industry c. Economic Importance of Fungi in Agriculture	**5+5+5**	**CO4**
Q 2	How do you measure fungus growth? How do you prevent fungus naturally? How are fungi classified based on morphology?	**5+5+5**	**CO3**
Section D (2Qx10M=20 Marks)			
Q 1	How many stages are there in the Plasmodium life cycle? Draw labeled diagrams?	**5+5**	**CO1**
Q 2	How do fungi differ from algae? Why are fungi important in the ecosystem?	**5+5**	**CO3**