M.Sc. MICROBIOLOGY SECOND SEMESTER PHYCOLOGY AND MYCOLOGY MMB-202

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Objective)

Time: 30 mins.

Choose the correct answer from the following:

- Leave like lichens are called:
 - a. Crustose

b. Foliose

c. Fructicose

- d. None of the above
- 2. The female sex organ of ascolichen is known as:
 - a. Ascogonium

b. Asci

c. Carpogonium

- d. Oogonium
- 3. The algal partner in Lichen is termed as:
 - a. Phycobiont

b. Mycobint

c. Mycelium

- d. Mycorrhiza
- 4. Early blight of potato is caused by:
 - a. Clostridium

b. Phytophthora

c. Alternaria

- d. Aspergillus
- 5. Cell wall of fungi is made up of:
 - a. Starch

b. Polysaccharide

c. Chitin

- d. Glucose
- 6. Sac like strucures of ascomycetes is known as:
 - a. Ascus

b. Ascospores

c. Ascogonium

- d. Carpogonium
- 7. Toadstools are included under:
 - a. Ascomycetes

- b. Basidiomycetes
- c. Deuteromycetes
- 8. Posterior flagellum of oomycetes is_
- d. Slime moulds

a. Tinsel

b. Whiplash

c. Needle

d. None of the above

- 9. "Mykes" means:
 - a. Mycology

b. Fungus

c. Mushroom

- d. Both b and c
- blocks xylem vessels in plants and causes wilting symptoms.
 - a. Gum deposition

b. Abscission layers

c. Tyloses

d. All of the above

2023/06

SET

Full Marks: 70

Marks: 20

1×20=20

11. Arrange Disease cycle in correct format. a. Inoculation-penetration-inection-incubation-invasion-reproduction-dissemination-overwintering c. Invasion-Incubation-penetration-infection-incubation-reproduction-dissemination-overwintering c. Invasion-Incubation-reproduction-dissemination-overwintering d. Overwintering; invasion-Inoculation-penetration-infection-incubation-reproduction-dissemination overwintering. 12. "Target board effect" is related to: a. Miscor c. Puccinia d. Phytophthora d. Phytophthora d. Phytophthora d. Phytophthora d. Polysiphonia d. Laminaria d. Phytophthora d. Polysiphonia d. Laminaria d. Phytophthora d. Polysiphonia d. Laminaria d. Early blight of potato d. Red rot of sugarcane d. Red rot of sugarcane d. Agar-Agar is obtained from: a. Celidium b. Polysiphonia d. Laminaria d. Sarch d. Red rot of sugarcane d. Any polysaccharide d. Starch d. Starch d. Starch d. Starch d. Starch d. Sarch d. All of the above d. All of the above d. All of the above d. Provides protection, anchorage and absorption for the algae c. Provides protection, anchorage and absorption for the algae c. Provides protection, anchorage and absorption for the algae c. Rhizopus d. Alsoprillius d. Provides food for the algae d. Provides food for the Aspergillus				
a. Mucor c. Puccinia b. Alternaria d. Phytophthora 13. The symptom of red rot of sugarcane mostly found on: a. Leaf c. Roots d. Both a and b 14. Agar-Agar is obtained from: a. Gelidium c. Fucus d. Laminaria 15. Irish Famine was associated with: a. Wilt of arahar c. Late blight of potato d. Red rot of sugarcane 16. Which one of the following is present in blue green algae? a. Starch c. Floridian starch d. Any polysaccharide 17. Storage form of food in Red algae is: a. Glycogen c. Floridean starch d. Starch 18. Sexual reproduction in volvox is: a. Oogamous c. Anisogamous d. All of the above 19. There exists a close association between the algae and the fungus within a lichen. The fungus: a. Fixes the atmospheric nitrogen for the algae c. Provides protection, anchorage and absorption for the algae 20. Common bread mould is: a. Yeast c. Rhizopus d. Aspergillus		 a. Inoculation-penetration-infection-incubation-invasion-reproduction-dissemination-overwintering c. Invasion- Inoculation-penetration-infection-incubation- reproduction-dissemination-overwintering 		invasion-reproduction-dissemination- overwintering Overwintering- invasion- Inoculation- penetration-infection-incubation-
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2 USTM/COE/R-01	20.	a. Yeast		
2 USTM/COE/R-01		- -	-	
		2		USTM/COE/R-01

$\left(\underline{\text{Descriptive}} \right)$

Time: 2 hr. 30 mins.

	[Answer question no.1 & any four (4) from the rest]	
1.	Describe the life cycle of Zygomycetes with neat labelled diagram.	10
2.	Draw a neat labelled diagram of a diatom cell. Discuss the vegetative reproduction in diatoms with neat diagram.	3+7=10
3.	Describe briefly the Red rot of sugarcane with suitable diagrams.	10
4.	Discuss the defence structures developed by tissues in plants after the attack of the pathogen with suitable diagrams.	10
5.	Define Lichen. Write a note on specialized structures of lichen thallus with suitable diagrams.	2+8=10
6.	Write short notes on: a) General characteristic of Fungi b) Clamp connections in basidiomycota	5+5=10
7.	Write short notes on: a) Fritsch classification of algae b) General characteristics of algae	5+5=10
8.	Define mycorrhiza. Describe the types with neat labelled diagrams. Draw the flow chart for mass production of mycorrhizal biofertiliser.	1+7+2=10

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Marks: 50