

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2023 – 2024 & thereafter)

B. Sc. DEGREE EXAMINATION, NOVEMBER 2024
BRANCH V (a) – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY
FIRST SEMESTER

COURSE : MAJOR – CORE
PAPER : ALGAE, FUNGI AND LICHENS
SUBJECT CODE : 23BT/MC/AF14
TIME : 3 HOURS

MAX.MARKS:100

Q. No.	SECTION A (20 x 1 = 20)	CO	KL
	ANSWER ALL QUESTIONS		
	I Fill in the blanks		
1	Fruiting body of <i>Agaricus</i> is called as _____.	1	1
2.	<i>Albugo</i> causes _____ disease.	1	1
3.	The algal component of lichen is called _____.	1	1
4.	The male sex organ of <i>Chara</i> is called _____.	1	1
5.	An example of coprophilous fungus is _____	1	1
	II State whether true or false		
6.	The leaf like erect portion in <i>Caulerpa</i> is known as assimilator.	1	1
7.	Sexual reproduction is present in Myxophyceae.	1	1
8.	<i>Sargassum</i> is commonly called as gulf weed.	1	1
9.	<i>Synchytrium</i> causes the black wart disease in potato.	1	1
10.	Dolipore septum is characteristic to Chytridiomycetes.	1	1
	III Choose the correct answer		
11.	Trabeculae is seen in _____ (a) <i>Cladophora</i> (b) <i>Volvox</i> (c) <i>Navicula</i> (d) <i>Caulerpa</i>	1	1
12.	The common reserve food material of fungus is _____. (a) starch (b) glycogen (c) xanthophyll (d) violaxanthin	1	1
13.	The antibiotic derived from <i>Chlorella</i> is _____. (a) Ampicillin (b) Penicillin (c) Chlorellin (d) Cyclocin	1	1
14.	The fungus <i>Puccinia</i> has _____ plant as its secondary host. (a) barberry (b) wheat (c) paddy (d) groundnut	1	1
15.	Aegagropilous habit is seen in _____. (a) <i>Chara</i> (b) <i>Chlorella</i> (c) <i>Caulerpa</i> (d) <i>Cladophora</i>	1	1
	IV Match the following		
16.	<i>Nostoc</i> - kieselgur	1	1
17.	Ascomycetes - gilled fungus	1	1
18.	Diatomaceous earth - ascospores	1	1
19.	<i>Agaricus</i> - coenobium	1	1
20.	<i>Volvox</i> - heterocyst	1	1
	SECTION B (8 X 2 = 16)	CO	KL
Q. No.	ANSWER ANY 8 OF THE FOLLOWING IN 50 WORDS		
21.	What are crustose lichens?	2	2
22.	Specify the significance of Diatoms.	2	2

23.	Define an agarophyte.	2	2
24.	Differentiate isogamy and anisogamy.	2	2
25.	What is isidia?	2	2
26.	List the significance of blue green algae.	2	2
27.	Mention any four characteristic features of fungi.	2	2
28.	Give the salient features of Basidiomycetes.	2	2
29.	Enumerate any two characteristic feature of the class oomycetes.	2	2
30.	What is carrageenan?	2	2
SECTION C (4 X 6 = 24) ANSWER THE FOLLOWING IN ABOUT 500 WORDS.			
31.	Deduce the structure of <i>Nostoc</i> . (OR)	3	3
32.	Assess the types of vegetative reproduction in <i>Chara</i> .	3	3
33.	Explain the structure of <i>Peziza</i> apothecium. (OR)	3	3
34.	Elaborate the asexual reproduction of <i>Aspergillus</i> .	3	3
35.	Comment on economic importance of Algae. (OR)	4	4
36.	Analyse the various stages of reproduction in <i>Gracilaria</i> .	4	4
37.	Discuss the structure of the basidiocarp of <i>Agaricus</i> . (OR)	4	4
38.	Elaborate the reproduction in <i>Usnea</i> .	4	4
SECTION D (2 X 20 = 40) ANSWER THE FOLLOWING IN 1000 WORDS. DRAW DIAGRAMS WHEREVER NECESSARY			
39.	Classify algae according to F.E Fritsch and discuss the characteristic features of major algal classes. (OR)	5	5
40.	Summarize the life cycle of <i>Sargassum</i> .	5	5
41.	Critically comment on the life cycle of <i>Puccinia</i> . (OR)	5	5
42.	Elaborate on the life cycle of <i>Plasmodiophora</i> .	5	5

