STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086 (For candidates admitted in during the academic year 2019 – 2020 & thereafter)

SUBJECT CODE: 19BT/AC/GB14

B. Sc. DEGREE EXAMINATION, NOVEMBER 2022 BRANCH VI (a) – ADVANCED ZOOLOGY AND BIOTECHNOLOGY FIRST SEMESTER

COURSE PAPER TIME				MAX.MARKS:100	
				$(18 \times 1 = 18 \text{ marks})$	
I CHOOSE THE CORRECT ANSWER:				(5x1=5)	
1. What is t	he mode	of sexual reproduction	in Chara		
(a) Oogamous		(b) Anisogamous	(c) Isogamous	(d) All of the above	
2. The divis	sion of fu	ngi called 'Club fungi'			
(a) Zygomycota		(b) Deuteromycota	(c) Basidiomycota	(d) Ascomycota	
3. Cercospo	ora perso	nata causes disease in			
(a) Ground nut		(b) Sugarcane	(c) Paddy	(d) Wheat	
4. Pick the	right sequ	nence of taxonomic cat	egories		
(a) Divis	sion-class	-family-order-genus-sp	pecies (b) Division-cla	ss-family-order-species-genus	
(c) Divis	ion-class	-order-family-genus-sp	pecies (d) Division-ord	ler-class-family-genus-species	
5.Which of	the follo	wing is commonly used	d as a nitrogen fixer in	paddy fields?	
(a) Frank	kia	(b) Oscillatoria	(c) Azospirrilum	(d) Rhizobium	
II FILL IN THE BLANKS:				(5 x1=5)	
6. The term	Algae w	as coined by			
7. Fungi rep	oroduce b	у			
8. Plant patl	hology m	eans the study of			
9	is called the father of Taxonomy				
10		gardening is with	out synthetic fertilizer	s and pesticides	
III STATE	WHET	HER THE FOLLOW	ING STATEMENTS	ARE TRUE OR FALSE: (3x1=3)	
11. Algae a	re photos	ynthetic organisms			
12. Aspergi	llus come	es under the division A	scomycota		

13. *Polyporus* sp. is edible

IV MATCH THE FOLLOWING:

(5x1=5)

14. Algae - Paddy

15. *Rhizopus* - Biofertilizer

16. Citrus canker - Fungi 17. Poaceae - *Chara*

18. *Rhizobium* - Xanthomonas sp.

V ANSWER ANY SIX QUESTIONS IN 50 WORDS EACH

(6x3=18)

- 19. Stipulodes
- 20. Air bladder
- 21. Chlamydospore
- 22. Vegetative structure of *Polyporus*
- 23. Control of Citrus Canker
- 24. Verticillaster inflorescence
- 25. Spikelet in Poaceae
- 26. Define soil
- 27. Rhizobium as Biofertilizer.

SECTION - B

ANSWER ANY FOUR QUESTIONS. EACH ANSWER NOT TO EXCEED 200 WORDS. DRAW DIAGRAMS WHEREVER NECESSARY. (4x6=24)

- 28. Describe the reproduction in Sargassam
- 29. List out the important salient features of Fungi
- 30. Control of Red rot of sugarcane
- 31. List out the general characters and the economic importance of the family Poaceae
- 32. Give the economic importance of the family Apocynaceae
- 33. List the benefits of organic garden

SECTION - C

ANSWER ANY TWO QUESTIONS. EACH ANSWER NOT TO EXCEED 1000 WORDS. DRAW DIAGRAMS WHEREVER NECESSARY. (2x20=40)

- 34. Discuss the structure and reproduction in *Nostoc*
- 35. Give a detailed account on the causal organism, symptoms and control measures of the following diseases
 - a. Citrus canker
 - b. Tikka disease
- 36. Elaborate the outline of Bentham and Hooker's system of classification.
- 37. Describe the classification of different types of soil.
