FIRST YEAR HIGHER SECONDARY PRE MODEL EXAMINATION

Part – III

BIOLOGY

PART – A BOTANY

FYCBTA22/1 **KEY** **Maximum score: 30**

Q.No.	PART–I	Split score	Total score
1	Prions	1	1
2	Diatoms	1	1
3	(c) Hyphae	1	1
4	Basidiocarp	1	1
5	Pellicle	1	1
6	(d) T.O. Diener	1	1
7	Methanogens	1	1
8	Slime moulds	1	1
9	Deuteromycetes	1	1
10	Protein coat of the virus	1	1
	PART-II		
11	*a) Red dinoflagellates [Gonyaulax]* Red tide is harmful because the toxins released by *Gonyaulax* may kill other marine animals such as fishes.	1 1	2
12	a) Heterocysts b) Nostoc and Anabaena	1 ½ +½	2
13	Mosaic formation, leaf rolling and curling, yellowing and vein clearing, dwarfing and stunted growth. [any 4]	½ x4	2
14	a) Mycorrhiza b) Bacterial viruses or bacteriophages	1 1	2
15	A-Coccus(spherical) , B-Bacillus (rod-shaped), C-Spirillum (spiral-shaped) D-Vibrium (comma-shaped)	½ x4	2
16	(a) b) Having a different cell wall structure	½ ½ ½ ½	2
17	(i) *Puccinia* (ii) *Ustilago*	1 1	2
18.	a) Phycobiont b) Mycobiont **c)** Lichens are very good pollution indicators , they do not grow in polluted areas.	½ ½ 1	2
19.	a) Dinoflagellates *b) Euglena* c) Slime mould d) *Paramoecium*	½ ½ ½ ½	2
20.	a) Dead remains of diatoms are known as 'diatomaceous earth' b) 1. Used in polishing / Filtration of oils and syrups [Any 1]	1 1	2
	PART III		
21	a) Sleeping sickness - *Trypanosoma* b) Malarial parasite - *Plasmodium* c) Cilia -*Paramoecium*	½ ½ ½	3

Salty areas	Hot springs	Marshy areas
Halophiles	*Thermoacidophiles*	*Methanogens*

	d) Pseudopodia - *Amoeba* e) Smallest living cell -Mycoplasma f) Golden algae - Desmids	½ ½ ½	
22	**(**a) Photosynthetic Autotrophic bacteria (any 1 points) -Form blooms in polluted water bodies. -Fix atmospheric nitrogen (b) Chemosynthetic Autotrophic bacteria (any 1 point) -Oxidise various inorganic substances such as nitrates, nitrites and ammonia -Recycle nutrients like nitrogen, phosphorus, iron and sulphur. (c) Heterotrophic bacteria (any 1 point) -Decomposers. -Making curd from milk, -Production of antibiotics, -Fixing nitrogen in legume roots, -Pathogens cause damage to human beings, crops, farm animals and pets.	**1** **1** **1**	**3**
23	a) (i) Fusion of protoplasms between two motile or non-motile gametes called plasmogamy. (ii) Fusion of two nuclei called karyogamy. (iii) Meiosis in zygote resulting in haploid spores. b) In some fungi (ascomycetes and basidiomycetes), karyogamy does not takes place immediately after plasmogamy So an intervening dikaryotic stage (n + n, i.e., two nuclei per cell) occurs; such a condition is called a dikaryon and the phase is called dikaryophase	**1 ½** **1 ½**	**3**
24	a) R.H. Whittaker b) Cell structure, body organisation, mode of nutrition, reproduction and phylogenetic relationships	½ **2½**	**3**
25	A - Ascomycetes B - Coenocytic C - Branched and septate D - Aplanospore E- Conidiospore F - Basidiospore	**½ x 6**	**3**