

Reg.No.....

FYCBTA22/1

Name.....

**FIRST YEAR HIGHER SECONDARY PRE MODEL EXAMINATION**

Part – III

**BIOLOGY**

**PART – A: BOTANY**

(Maximum: 30 Scores)

Biological classification

Time: I Hour

Cool-off time: 10 Minutes

**PART I**

Answer any seven questions from 1 to 10. Each carries 1 score.

(7x1=7)

1. Observe the relationship between the first pair and fill in the blank.

(a) AIDS: *Virus*

(b) Mad cow disease: \_\_\_\_\_

2. \_\_\_\_\_ are the chief 'producers' in the oceans.

3. The fungal body consist of long, slender thread-like structures called

(a) Mycelium

(b) Capsomere

(c) Hyphae

(d) Chitin

4. The fruiting body of Basidiomycetes is called \_\_\_\_\_

5. Instead of a cell wall, *Euglenoids* have a protein rich layer called \_\_\_\_\_

6. Which scientist among the following who discovered Viroids ?

(a) *Dmitri Ivanowsky*

(b) *M.W. Beijerinck*

(b) *W.M. Stanley*

(d) *T.O. Diener*

7. Which group of Archaeobacteria is responsible for the production of biogas?

8. Name the group of Protista showing saprophytic mode of nutrition.

9. Which class of the fungi is commonly known as *Imperfect Fungi*?

10. What are capsids?

### PART II

Answer any seven questions from 11 to 20. Each carries 2 scores.

(7x2=14)

11. (a) Name the organism which make the sea appear red or *Red tide*?  
(b) Why they are harmful?

12. Blue green algae can fix atmospheric nitrogen with the help of specialised cells in their body.

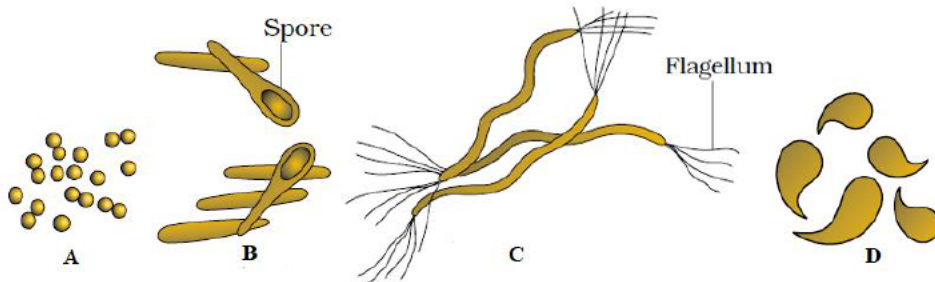
- (a) Name the specialised cell of blue green algae for nitrogen fixation.  
(b) Give two examples for nitrogen fixing blue green algae.

13. List any four symptoms of viral diseases in plants.

14. Write the one word:

- (a) Symbiotic association between root of higher plants and fungi.  
(b) Viruses that infect the bacteria.

15. Bacteria are grouped under four categories based on their shape. Identify the categories A, B, C and D given below.



16. (a) Given below are different types of Archaeobacteria. Arrange them in suitable habitat.  
[*Methanogens* , *Halophiles* ,*Thermoacidophiles*]

Salty areas	Hot springs	Marshy areas

(b) Which feature of the Archaeobacteria is responsible for their survival in extreme conditions?

17. Name the fungus which cause,

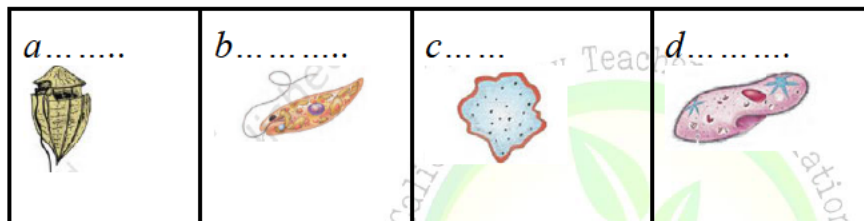
- (i) Rust in wheat                                  (ii) Smut.

18. Lichens are the symbiotic association between algae and fungi.

- (a) The algal component of Lichen is known as \_\_\_\_\_  
(b) The fungal component of Lichen known as \_\_\_\_\_  
(c) What is the ecological significance of Lichens?

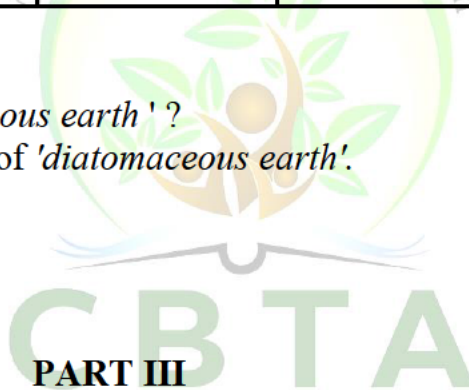
19. Fill in the blanks (a-d) from the bracket given below

[ *Euglena*, *Dinoflagellates*, *Paramecium*, *Slime mould* ]



20. (a) What is 'diatomaceous earth' ?

(b) Write any one use of 'diatomaceous earth'.



**Answer any three questions from 21 to 25. Each carries 3 scores.**

**(3x3=9)**

21. Match the following:-

- (a) Sleeping sickness - *Plasmodium*  
(b) Malarial parasite - *Desmids*  
(c) Cilia - *Mycoplasma*  
(d) Pseudopodia - *Trypanosoma*  
(e) Smallest living cell - *Paramecium*  
(f) Golden algae - *Amoeba*

22. State any one importance of:-

- (a) *Photosynthetic autotrophic bacteria*  
(b) *Chemosynthetic autotrophic bacteria*  
(c) *Heterotrophic bacteria*

23. (a) What are the three steps involved in the sexual cycle of kingdom fungi?  
 (b) Explain the formation of *dikaryon phase* during sexual cycle.
24. (a) Who proposed Five Kingdom Classification?  
 (b) What are the main criteria used for Five Kingdom classification?
25. Analyse the table given below and fill in the blanks accordingly.

<b><i>Division of fungus</i></b>	Phycomycetes	____(A)____	Basidiomycetes	Deuteromycetes
<b><i>Mycelium</i></b>	____(B)____	Branched and septate	Branched and septate	____(C)____
<b><i>Asexual spore</i></b>	Zoospore / ____ (D) ____	____(E)____	Not found	Conidiospore
<b><i>Sexual spore</i></b>	Zygospore	Ascospore	____(F)____	Not found

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