



*Faculty of Science*

*Botany and Microbiology Department*

*Microbiology Mic 140*

*Prof. Ibraheem IBM*

***2<sup>nd</sup> Revision in***

***Microbiology***

***MIC 140***

***2<sup>nd</sup> Term 1431 / 1432***

***Prof.Dr. Ibraheem IBM***



**I.** Fill in the blanks

1. The red pigment of algae is called ....., while the blue pigment is called .....
2. Symbionts fungi are live in ..... with other organism
3. In aerobic respiration microbes require .....
4. Filaments of cyanobacteria are called as .....
5. Heterocysts are present in .....
6. Viruses cannot be grow on ..... media .
7. Euglenoids store their foods as .....
8. Diatoms store their foods as ..... or .....

**II.** Chose the correct answer:

1. *Paramecium*:
  - Multinucleated prptozoa
  - uninucleated prptozoa.
2. *Paramecium* reproduce:
  - Sexually
  - Asexually
  - all the above.
3. *Paramecium* is :
  - Autotrophic
  - Heterotrophic
  - All the above.
4. Anal pore in *Paramecium* function as :
  - Remove wastes
  - Pump out excess water
  - Traps a bit.



5. Contractile vacuole in *Paramecium* function as :
  - pump out excess water
  - remove wastes
  - absorb nutrients.
  - All the above.
6. Oral groove in *Paramecium* :
  - Sweep the food into the cell
  - Pump the excess of water
  - All the above
7. Small nucleus in *Paramecium* function as :
  - Metabolic processes
  - Control the sexual reproduction pathways
8. Cilia in paramecium function as:
  - Protective covering the pellicle
  - For moving
  - All the above
9. Plasmodium
  - Move by cilia
  - Move by pseudopodia
  - Don't move
10. The protozoa are
  - Multicellular
  - All unicellular
  - Both
11. *Giardia*
  - Move by flagella
  - Move by cilia



- Move by pseudopodia
- Don't move

12. *Focus* is representative form of

- Red algae
- Brown algae
- Ascomycetes
- Viruses.

13. They have silica in their cell walls:

- Chlorophyta
- Bacillariophyta
- Phaeophyta
- All the above

14. Euglenophyta are

- Phototrophic
- Heterotrophic
- All the above

15. The main pigment in Chlorophyta is

- Starch
- Chlorophyll (a)
- Xanthophylls

16. The main constituents of fungal cell wall is

- Cellulose
- Silica
- Chitin

17. Fungi are

- Heterotrophic
- Autotrophic



- All the above
18. Lichens are
- Symbiosis between fungus and cyanobacterium
  - Symbiosis between fungus and bacteria
  - All the above
19. Mycorrhiza are
- Fungal parasites on roots of higher plants
  - Symbiosis between fungus and roots of higher plants
  - Saprophytic processes of fungal hyphae on roots of higher plants.
20. Mycorrhiza are
- Endophytic Mycorrhiza
  - Ectophytic Mycorrhiza
  - All the above
21. Obligate parasitic fungi are
- Grow on dead organic matters
  - Grow only on their living hosts
  - All the above
22. Facultative parasitic fungi such as
- *Fusarium*
  - *Puccinia graminis*
  - *Rhizopus*
23. Fungi are
- Aerobes
  - An aerobes
  - All the above
24. Reserve food materials in fungi are
- Starch



*Faculty of Science*

*Botany and Microbiology Department*

*Microbiology Mic 140*

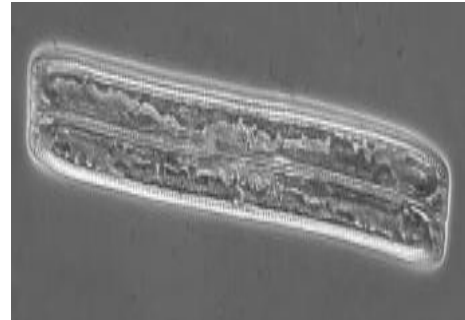
*Prof. Ibraheem IBM*

- Glycogen
- Cellulose

III. Identify these organisms



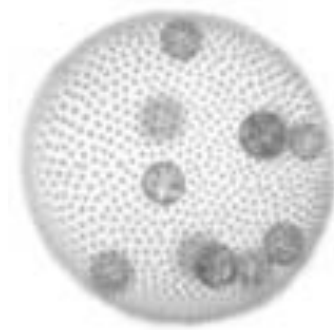
A .....



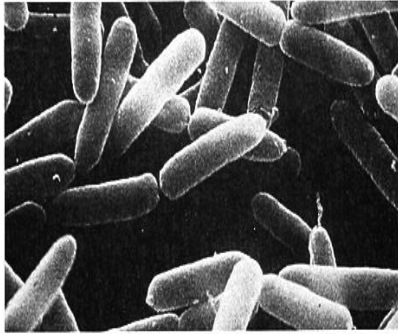
B .....



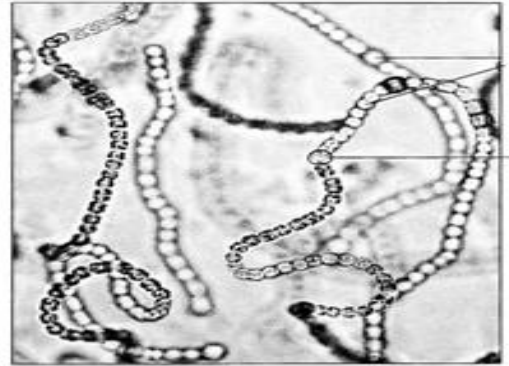
C .....



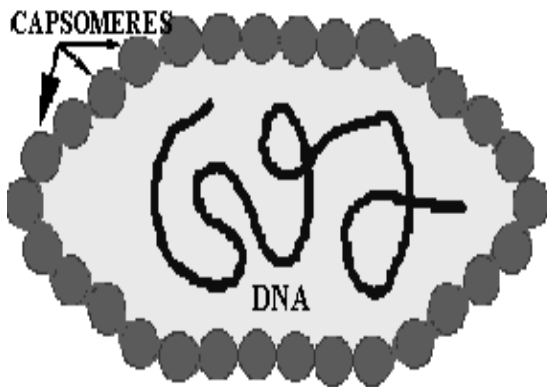
D .....



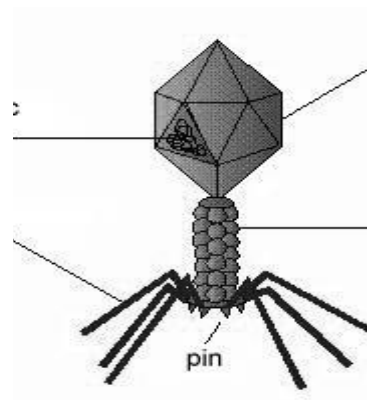
E .....



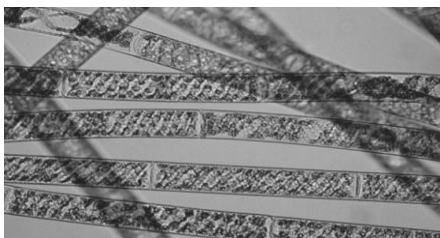
F .....



G .....



H .....



H .....



IV. Match these sentences

| Words                 | Sentences  |
|-----------------------|--|
| 1. Capsoids           | A green algae                                    |
| 2. Virology           | Lives as parasitic.                              |
| 3. Saprophytes        | Moves by cilia.                                  |
| 4. Phycology          | Have similar gametangia and non-septated hyphae. |
| 5. <i>Plasmodium</i>  | the branch of science dealing with viruses       |
| 6. <i>Volvox</i>      | Protein subunits of virus coat                   |
| 7. Zygomycetes        | Moves by pseudopodia                             |
| 8. Amoeba             | the branch of science dealing with algae.        |
| 9. Viruses size       | Range between 10 and 300 nanometers              |
| 10. <i>Paramecium</i> | Microbes live on dead materials                  |





V. State whether the statement is True or False .

| Statement  | True | False |
|--|------|-------|
| 1. Diatoms are multicellular organisms   |      |       |
| 2. Viral genome contains either DNA or RNA                                     |      |       |
| 3. Attachment is a specific binding of a virus.                                |      |       |
| 4. True algae belong to kingdom Monera   |      |       |
| 5. viruses need non- living host to replicate                                  |      |       |
| 6. <i>Spirogyra</i> is example of unicellular green algae.                     |      |       |
| 7. Sporozoans are move by cilia  |      |       |
| 8. Prokaryotes have nuclear membrane   |      |       |
| 9. Sporozoans are all parasites  |      |       |
| 10. <i>Volvox</i> has pseudopodia for movement                                 |      |       |
| 11. Coenocytic hyphae are essentially uninuclate                               |      |       |
| 12. Green algae store their energy as starch                                   |      |       |
| 13. Akinetes are present in eubacteria   |      |       |
| 14. <i>Rhizopus</i> have septated hyphae                                       |      |       |
| 15. <i>Penicilium</i> and <i>Aspergillus</i> have branched and septated hyphae |      |       |



*Faculty of Science*

*Botany and Microbiology Department*

*Microbiology Mic 140*

*Prof. Ibraheem IBM*

VI. Mention the topic steps (titles only) of virus infections:

1. ....
2. ....
3. ....
4. ....
5. ....