



## Karanjia Auto College, Karanjia, Mayurbhanj,

CC-1

### Microbiology and Phycology

#### UNIT-I:

Fill in the blanks

1 marks

1. Mastigophora is named due to presence of \_\_\_\_\_.
2. Chromatophores bear \_\_\_\_\_.
3. Euglena belongs to \_\_\_\_\_.
4. If Euglena is phototrophic in sunlight, the mode of nutrition in dark is \_\_\_\_\_.
5. Colour of Euglena is \_\_\_\_\_.
6. Write down the systematic position of Euglena viridis. 7. Describe the structure of flagella of Euglena
8. What are paramylon bodies?
9. Describe the mode of nutrition of Euglena.
10. Justify the statement that Euglena is more an animal than a plant.
11. Entamoeba histolytica is the causative agent of \_\_\_\_\_.
12. The number of stages of life is \_\_\_\_\_.
13. The outer covering of Entamoeba is \_\_\_\_\_.
14. The clear zone surrounding the karyosome of Entamoeba is called \_\_\_\_\_.
15. The movement via pseudopodium of Entamoeba resembles \_\_\_\_\_.
16. Amoeba was 1<sup>st</sup> described by \_\_\_\_\_.
17. Amoeba belongs to class \_\_\_\_\_.
18. The posterior wrinkled region of Amoeba is called \_\_\_\_\_.
19. Amoeba is stained by \_\_\_\_\_.
20. The speed of Amoeba is \_\_\_\_\_.
21. Malaria parasite belongs to sub-phylum \_\_\_\_\_.
22. Out of the four species of Plasmodium, \_\_\_\_\_ is the rarest one.
23. \_\_\_\_\_ is the causative organism of benign tertian.
24. The malaria parasite being extracellular resident of mosquito, lives in \_\_\_\_\_.
25. The sexual cycle of malaria parasite is completed in \_\_\_\_\_.
26. Grantia and Scypha are \_\_\_\_\_ type of sponges.
27. \_\_\_\_\_ is known as urn-sponge.
28. \_\_\_\_\_ is known as crown sponge.
29. The other name of canal system is \_\_\_\_\_.
30. The contractile cells around dermal ostia are called \_\_\_\_\_.

Answer the followings.

1.5/2.5marks

1. Write down the systematic position of *Euglena viridis*.
2. Describe the structure of flagella of *Euglena*.
3. What are paramylon bodies?
4. Describe the mode of nutrition of *Euglena*.
5. Justify the statement that *Euglena* is more an animal than a plant.
6. Write the name of different stages of life cycle of *Entamoeba*.
7. Describe the trophozoite stage of *Entamoeba*.
8. Who causes Amoebiasis and who is the host?
9. Write down the treatment to Amoebiasis.
10. Justify that *Entamoeba* is not pathogenic but behaves as a pathogenic organism.
11. What is regeneration?
12. How one can maintain *Amoeba* culture?
13. Write a note on pseudopodia?
14. What is lobopodia?
15. What is plasmasol?
16. How many species of *Plasmodium* you know? Write their names.
17. What are the two phases that the malaria parasite spends in human body?
18. Define gametogony.
19. What is a cryptozoite?
20. Describe phanerozoic or exoerythrocytic schizogony?
21. Write the outline of passage of water current in Ascon type of sponges.
22. What is a Rhagon?
23. How the spongin fibres are formed?
24. Write a note on Eurypylous type of canal.
25. What are the functions of water current?

Long answer questions.

6 marks

1. Describe the life cycle and pathogenicity of *Plasmodium vivax*?
2. Describe the life cycle and pathogenicity of *Entamoeba histolytica*.
3. Write different types of canal system in sponges.

## UNIT-II

Fill in the blanks

1 marks

1. Alternation of generation of an organism, the asexual phase is \_\_\_\_\_ in nature.
2. In life cycle of *Obelia* the fixed polypoid phase is \_\_\_\_\_.
3. Medusa arises from \_\_\_\_\_.
4. The Medusa arises from blastostyle by the process called \_\_\_\_\_.
5. In *Obelia*, sex cells originate from \_\_\_\_\_.
6. Polymorphism means \_\_\_\_\_.
7. Medusae are concerned with \_\_\_\_\_ function.
8. \_\_\_\_\_ is trimorphic.
9. Corals belong to class \_\_\_\_\_ and \_\_\_\_\_.
10. Skeleton of a solitary coral is known as \_\_\_\_\_.
11. The calcareous exoskeleton of corals are secreted by \_\_\_\_\_.
12. The fused corallites in a colonial coral forms a skeletal mass called \_\_\_\_\_.
13. The larva of corals is \_\_\_\_\_.

14. Ctenophora are commonly known as \_\_\_\_\_.
15. Ctenophora bears \_\_\_\_\_ number of plates for locomotion.
16. \_\_\_\_\_ is the characteristic larva of development of Ctenophora.
17. Pleurobranchia belongs to order \_\_\_\_\_.
18. \_\_\_\_\_ is the sense organ of Pleurobranchia.

Answer the followings.

1.5/2.5marks

1. What do you mean by alternation of generations?
2. What are the two phases of Obelia life?
3. What is metagenesis?
4. Justify the statement, “a true alternation of generations can not be said to occur in Obelia.” 5.  
What is polymorphism?
6. What is genetic polymorphism?
7. What are the forms of Hydrozoa?
8. What are the importance of polymorphism?
9. What is called dimorphism?
10. What is coral?
11. Describe the soft structure of coral polyp.
12. What is sclerosepta?
13. Write a note on hexacorallian corals.
14. What is coral reef?
15. Write the names of 2 classes under phylum Ctenophora.
16. Write the affinities of Ctenophora with Coelenterata.
17. Write the affinities of Ctenophora with platyhelminthes.

Long answer questions.

6 marks

1. Write a note on metagenesis in obelia.
2. Define polymorphism. Write polymorphism in Cnidarians.
3. What are corals? Describe different types of coral reefs.

### UNIT-III

Fill in the blanks

1 marks

1. Flat worms belong to class \_\_\_\_\_.
2. *F. gigantica* is the liverfluke of \_\_\_\_\_ animal.
3. *F. hepatica* affects \_\_\_\_\_ animal.
4. \_\_\_\_\_ is called Chinese liverfluke.
5. \_\_\_\_\_ is the causative organism of clonorchiasis.
6. The complete life cycle of *F. hepatica* was studied by \_\_\_\_\_.
7. Fascioliasis is caused by \_\_\_\_\_.
8. *Taenia solium* belongs to class \_\_\_\_\_.
9. *Taenia solium* is called \_\_\_\_\_ tape worm.
10. \_\_\_\_\_ is beef tape worm.
11. \_\_\_\_\_ is the primary host of *T. solium*.
12. \_\_\_\_\_ is the device of attachment of *T. solium* to host intestine.

Answer the followings

1.5/2.5marks

1. What is liver rot?
2. Describe the morphology of *F. hepatica*.
3. Write down the body walls of *F. hepatica*.
4. What is digenetic life?
5. Excretory system of *F. hepatica* is responsible for?
6. Write the morphology of *T. solium*.
7. What is proglottid?
8. What is protandrous condition?
9. What is auto infection?
10. Differentiate taeniasis and cysticercosis.

Long answer questions.

6 marks

1. Describe the life cycle of *Fasciola hepatica*.
2. Write the symptoms, diagnostics, treatment and prophylaxis of disease caused by *Fasciola hepatica*.
3. Describe the life cycle of *Taenia solium*.
4. Write the symptoms, diagnostics, treatment and prophylaxis of disease caused by *Taenia solium*.

## UNIT-IV

Fill in the blanks

1 marks

1. The common name of Nematode is \_\_\_\_\_.
2. The coelom of *A. lumbricoides* is \_\_\_\_\_.
3. In female *A. lumbricoides* the genital pore is located at \_\_\_\_\_.
4. The opening of amphidial gland is called \_\_\_\_\_.
5. Tango receptor is a receptor for \_\_\_\_\_.
6. The filarial nematodes belong to the order \_\_\_\_\_.
7. The human filarial worm causes \_\_\_\_\_.
8. The intermediate host of filarial worm is \_\_\_\_\_.
9. \_\_\_\_\_ is the stage of infection to the intermediate host.
10. \_\_\_\_\_ is the infective stage of microfilariae to man.
11. Swelling of lymphnodes is called \_\_\_\_\_.
12. \_\_\_\_\_ is used for eradication of microfilariae from circulation.
13. In *A. lumbricoides* juveniles, the excretory system is formed by \_\_\_\_\_, 14. The excretory pore of *A. lumbricoides* arises from \_\_\_\_\_ side as a \_\_\_\_\_.
15. The chief excretory product of *A. lumbricoides* is \_\_\_\_\_.
16. Nervous system of *A. lumbricoides* was studied by \_\_\_\_\_.
17. \_\_\_\_\_ disease is caused by *A. lumbricoides*.

Answer the followings.

1.5/2.5marks

1. Write down the systematic position of *A. lumbricoides*.
2. How can you differentiate the sexes of *A. lumbricoides*?
3. What is a cloaca?
4. What are the body layers of *A. lumbricoides*?
5. What is moulting?
6. Write the names of 5 layers of cuticle of *A. lumbricoides*.
7. What are fenestrated membranes?

8. Describe the morphology of *W. bancrofti*.
9. Write a note on structure of microfilariae.
10. What is the importance of microfilariae?
11. Draw the life cycle of filarial worm.

Long answer questions.

6 marks

1. Describe the life cycle of *Ascaris lumbricoides*.
2. Write the symptoms, diagnostics, treatment and prophylaxis of disease caused by *Ascaris lumbricoides*.
3. Describe the life cycle of *Wuchereria bancrofti*.
4. Write the symptoms, diagnostics, treatment and prophylaxis of disease caused by *Wuchereria bancrofti*.
5. What are the parasitic adaptations of helminthes?