



BIOLOGY

BOOKS - MODERN PUBLISHERS

BIOLOGY (HINGLISH)

BIOLOGICAL CLASSIFICATION

Practice Problems Kingdom Systems

1. Name the criteria used by R.H. Whittaker for five-kingdoms of life



Watch Video Solution

2. Write about the contributions of John Ray, J.D. Hooker and J.K. Maheshwari.



Watch Video Solution

3. Name the books written by Carl P. Linnaeus.



Watch Video Solution

4. Write one example each of five kingdoms proposed by R.H. Whittaker



[Watch Video Solution](#)

5. Write the basis of modern classification



[Watch Video Solution](#)

6. What type of organisms does Kingdom Monera include?



Watch Video Solution

7. What kind of organisms does kirtgdom Protista include?



Watch Video Solution

8. Name some viral diseases.



Watch Video Solution

9. Name some symptoms of viral diseases.



[Watch Video Solution](#)

Practice Problems

1. Write any three drawbacks of kingdom protista.



[Watch Video Solution](#)

2. How lytic cycle differs from lysogenic cycle ?



[Watch Video Solution](#)

3. What are viroids ?



[Watch Video Solution](#)

4. Name the kingdom of multicellular consumers.



[Watch Video Solution](#)

5. Name the kingdom of prokaryotes.



[Watch Video Solution](#)

6. (i) Smallest animal virus

(ii) Largest animal virus

(iii) Smallest plant virus

(iv) Largest plant virus.



[Watch Video Solution](#)

Ncert File Ncert Exercise Questions

1. Discuss how classification systems have undergone several changes over a period of time ?



[Watch Video Solution](#)

2. State two economically important uses of:

(a) Heterotrophic bacteria

(b) Archaeobacteria



[Watch Video Solution](#)

3. What is the nature of cell-walls in diatoms?



[Watch Video Solution](#)

4. Find out what do the terms 'algal bloom' and 'red-tides' signify



[Watch Video Solution](#)

5. How are viroids different from viruses?



[Watch Video Solution](#)

6. Describe briefly the four major groups of Protozoa.



[Watch Video Solution](#)

7. Plants are autotrophic. Can you think of some plants that are partially heterotrophic?



[Watch Video Solution](#)

8. What do the terms phycobiont and mycobiont signify?



[Watch Video Solution](#)

9. Give a comparative account of the classes of Kingdom Fungi under the following:

(i) Mode of nutrition

(ii) Mode of reproduction



[Watch Video Solution](#)

10. What are the characteristic features of Euglenoids?



Watch Video Solution

11. Give a brief account of viruses with respect to their structure and nature of genetic material. Also name four common viral diseases.



Watch Video Solution

12. Organise a discussion in your class on the topic- Are viruses living or non-living?



Watch Video Solution

Ncert File Ncert Exemplar Problems A Multiple Choice Questions

1. All eukaryotic unicellular organisms belong to

A. Monera

B. Protista

C. Fungi

D. Bacteria

Answer: B



Watch Video Solution

2. The five kingdom classification was proposed by

A. R.H. Whittaker

B. C. Linnaeus

C. A. Roxberg

D. Virchow

Answer: A



Watch Video Solution

3. Organisms living in salty areas are called as

A. Methanogens

B. Halophiles

C. Heliophytes

D. Thermoacidophiles

Answer: B



Watch Video Solution

4. Naked cytoplasm, multinucleated and saprophytic are the characteristics of

A. Monera

B. Protista

C. Fungi

D. Slime molds

Answer: D



Watch Video Solution

5. An association between roots of higher plants and fungi is called

A. Lichen

B. Fern

C. Mycorrhiza

D. BGA

Answer: C



Watch Video Solution

6. A dikaryon is formed when

A. Meiosis is arrested

B. The two haploid cells do not fuse immediately

C. Cytoplasm does not fuse

D. None of the above

Answer: B



Watch Video Solution

7. Contagium vivum fluidum was proposed by

A. D.J. Ivanowsky

B. Beijerinck Stanley

C.

D. Robert Hook

Answer: B



Watch Video Solution

8. Mycobiont and Phycobiont are found in

A. Mycorrhiza

B. Root

C. Lichens

D. BGA

Answer: C



Watch Video Solution

9. Difference between Virus and Viroid is

A. Absence of protein coat in viroid but present in virus

B. Presence of low molecular weight RNA in virus but absent in viroid

C. Both a and b

D. None of the above

Answer: A



Watch Video Solution

10. With respect to fungal sexual cycle, choose the correct sequence of events

A. Karyogamy, Plasmogamy and Meiosis

B. Meiosis, Plasmogamy and Karyogamy

C. Plasmogamy, Karyogamy and Meiosis

D. Meiosis, Karyogamy and Plasmogamy

Answer: C



Watch Video Solution

11. Viruses are non-cellular organisms but replicate themselves once they infect the host cell. To which of the following kingdom do viruses belong to ?

A. Monera

B. Protista

C. Fungi

D. None of the above

Answer: D



Watch Video Solution

12. Members of phycomycetes are found in

(i). Aquatic habitats

(ii). On decaying wood

(iii). Moist and damp places

(iv). As obligate parasites on plants

Choose from the following options

A. None of the above

B. (i) and (iv)

C. (ii) and (iii)

D. All of the above

Answer: D



Watch Video Solution

Ncert File Ncert Exemplar Problems B Very Short Answer Type Questions

1. What is the principle underlying the use of cyanobacteria in agricultural fields for crop improvement ?



[Watch Video Solution](#)

2. A slide under microscope shows following features:

(i) Unicellularity

(ii) Well defined nucleus

(iii) Biflagellate-one flagellum lying

longitudinally and the other transversely

what would you identify it as?



[Watch Video Solution](#)

3. How is the five kingdom classification advantageous over the two kingdom classification ?



[Watch Video Solution](#)

4. Polluted water bodies have usually very high abundance of plants like Nostoc and Oscillitroia. Give reasons.



[Watch Video Solution](#)

5. Are chemosynthetic bacteria autotrophic or heterotrophic ?



[Watch Video Solution](#)

6. The common name of pea is simpler than its botanical (scientific) name *Pisum sativum* why then is the simpler common name not used instead of the complex scientific/botanical name in biology ?



[Watch Video Solution](#)

7. A virus is considered as a living organism and an obligate parasite when inside a host cell. But virus is not classified along with

bacteria or fungi. What are the characters of virus that are similar to non-living objects ?



[Watch Video Solution](#)

8. In the five kingdom system of Whittaker, how many kingdoms are eukaryotes ?



[Watch Video Solution](#)

Ncert File Ncert Exemplar Problems C Short Answer Type Questions

1. Diatoms are also called as 'pearls of ocean' why ? What is diatomaceous earth ?



[Watch Video Solution](#)

2. There is a myth that immediately after heavy rains in forest mushrooms appear in large number and make a very large ring or circle, which may be several metres in diameter. These are called as 'fairy rings' Can you explain this myth of fairy rings in biological terms.



[Watch Video Solution](#)

3. Neurospora an ascomycetes fungus has been used as a biological tool to understand the mechanism of plant genetics much in the same way as Drosophila has been used to study animal genetics. What makes Neurospora so important as a genetic tool ?



[Watch Video Solution](#)

4. Cyanobacteria and heterotrophic bacteria have been clubbed together in eubacteria of kingdom-Monera as per the 'five kingdom classificatin' even though the two are vastly different from each other. Is this grouping of the two types of taxa in the same kingdom justified ? If so, why ? Discuss the cellular composition of cyanobacteria and heterotrophic bacteria that make them introduced in eubacteria.



Watch Video Solution

5. At a stage of their cycle, ascomycetes fungi produce the fruiting bodies like apothecium, perithecium or cleistothecium. How are these three types of fruiting bodies different from each other ?

Discuss the type of fruiting bodies formed by ascomycetes fungus and differentiate accordingly on the basis of their structures.



[Watch Video Solution](#)

6. What observable features in Trypanosoma would make you classify it under kingdom-Protista ?

Discuss cell structure of Trypanosoma also discuss its different strain in brief.



[Watch Video Solution](#)

7. Fungi are cosmopolitan, write the role of fungi in your daily life.



[Watch Video Solution](#)

Ncert File Ncert Exemplar Problems Long Answers Type Questions

1. Algae are known to reproduce asexually by variety of spores under different environmental conditions. Name these spores and the conditions under which they are produced.

Asexual reproduction in algae is very common mean of reproduction.



[Watch Video Solution](#)

2. Apart from chlorophyll, algae have several other pigments in their chloroplast. What pigments are found in blue, green, red and brown algae, that are responsible for their characteristic colours ?



[Watch Video Solution](#)

3. Make a list of algae and fungi that have commercial value as source of food, chemicals, medicines and fodder.



[Watch Video Solution](#)

4. Biological classification is a dynamic and ever evolving phenomenon which keeps changing with our understanding of life forms. Justify, the statement taking any two examples

.

Discuss the changes made in studying biological classification from time to time and also enumerate the need for this changes.



[Watch Video Solution](#)

Hots Higher Order Thinking Skills Brain Twisting Very Short Answer Questions One Mark Each

1. In which Kingdom of five kingdom classification, nuclear membrane is not present ?



[Watch Video Solution](#)

2. Name the kingdoms of three kingdom system classification.



[Watch Video Solution](#)

3. Who proposed the term Protista ?



[Watch Video Solution](#)

4. Who gave the two kingdom system classification ?



[Watch Video Solution](#)

5. Which Methanogen is present in rumen of cattle ?



[Watch Video Solution](#)

6. Name the anticoagulant present in bacterial endospore.



[Watch Video Solution](#)

7. Which bacteria are responsible for diseases :

(i) Cholera (ii) Tetanus



[Watch Video Solution](#)

8. What are auxospores ?



[Watch Video Solution](#)

9. What is the alternative name of consumer decomposer protists' ?



[Watch Video Solution](#)

10. Name the grooves present in dinoflagellates.



[Watch Video Solution](#)

11. Define coenocytic mycelium.



[Watch Video Solution](#)

12. Write the name of an aquatic fungus.



[Watch Video Solution](#)

**Hots Higher Order Thinking Skills Brain Twisting
Short Answer Questions Two Mark Each**

1. What is ascocarp?



[Watch Video Solution](#)

2. What is puffball?



[Watch Video Solution](#)

3. What is soledium?



[Watch Video Solution](#)

4. Name the fungus on rolling orange as green blue mould.



[Watch Video Solution](#)

5. What do you understand by terms lignicolous and corticolous?



Watch Video Solution

6. What is basidiocarp?



Watch Video Solution

7. What is sclerotium?



Watch Video Solution

8. Define myxamoeba.



Watch Video Solution

9. What is bioluminescence?



Watch Video Solution

10. What do you understand by isochronic movement of cilia?



Watch Video Solution

**Hots Higher Order Thinking Skills Brain Twisting
Short Answer Questions Three Mark Each**

1. Who proposed the five kingdom system of classification. Write the name of five kingdoms.



Watch Video Solution

2. Write the characteristics of archaebacteria?

How do these obtain food? How they are able to tolerate conditions like acidity and high temperature?



[Watch Video Solution](#)

3. Why the members of class Deuteromycetes are considered the fungi imperfecti?



[Watch Video Solution](#)

4. Discuss the living features of viruses.



[Watch Video Solution](#)

5. Differentiate between ascocarp and basidiocarp.



[Watch Video Solution](#)

**Hots Higher Order Thinking Skills Brain Twisting
Long Answer Questions Five Mark Each**

1. Give an outline of five kingdom system of classification



[Watch Video Solution](#)

2. Write the general characteristics of dinoflagellates.



[Watch Video Solution](#)

3. Which of the organisms are called jewels of plant world? Elaborate your answer.



[Watch Video Solution](#)

4. Differentiate between monera and protista.



[Watch Video Solution](#)

[Quick Memory Test A Say True Or False](#)

1. Charaka was the first to make a serious attempt to classify living things.



Watch Video Solution

2. Prokaryotes are organisms without a nucleus.



Watch Video Solution

3. Leeuwenhoek was the first to observe bacteria.



[Watch Video Solution](#)

4. Actinomycetes belong to Monera,



[Watch Video Solution](#)

5. All autotrophs are Monerans.



[Watch Video Solution](#)

6. In geological history complex organisms come after the simpler ones.



[Watch Video Solution](#)

Quick Memory Test Complete The Missing Links

1.egg is the largest eukaryotic cell.



[Watch Video Solution](#)

2. Whittaker's five kingdoms are Monera....., Fungi, Plantae and



Watch Video Solution

3. Prokaryotes are without definite.....



Watch Video Solution

4. Yeasts arecelled



Watch Video Solution

5. Nepenthes is an Plant



[Watch Video Solution](#)

6. The organisms which cannot manufacture their food due to absence of chlorophyll are called



[Watch Video Solution](#)

7. Chlamydomonas is an unicellular green



[Watch Video Solution](#)

8. Plants possess chlorophyll, hence are



[Watch Video Solution](#)

9. Plants and animals both avoid



[Watch Video Solution](#)

Quick Memory Test Choose The Correct Alternative

1. Cell wall is made up of peptidoglycan in monera/protista.



[Watch Video Solution](#)

2. Heterocysts are present in bacteria/cyanobacteria.



[Watch Video Solution](#)

3. *Puccinia graminis tritici* causes black stem rust of wheat/loose smut of wheat.



[Watch Video Solution](#)

4. Lichens growing on soil, are called as saxicolous/terricolous.



[Watch Video Solution](#)

5. Basidiomycetes/Deuteromycetes grow only by asexual spores.



[Watch Video Solution](#)

Quick Memory Test Suitable Words

1. Bacteria : Prokaryote : Paramecium.....



[Watch Video Solution](#)

2. Algae : Autotrophic :: Fungi :



Watch Video Solution

3. Multicellular producers : Plants ::
Multicellular decomposers :



Watch Video Solution

4. Bacteria : Nuclcoid : Yeast :



Watch Video Solution

Quick Memory Test Analogy Type Questions

1. Remains of an organism of a former geological age.



[Watch Video Solution](#)

2. Science of classification of organisms.



[Watch Video Solution](#)

3. Evolutionary history of a group of organisms is called :



[Watch Video Solution](#)

4. Organisms which synthesize their own food using chemical energy



[Watch Video Solution](#)

[Quick Memory Test Reasoning Type Questions](#)

1. Plants are large organisms.



[Watch Video Solution](#)

2. Bacteria and blue-green algae are prokaryotes



[Watch Video Solution](#)

3. Fungi are heterotrophic,



[Watch Video Solution](#)

4. Lichens are symbiotic.



[Watch Video Solution](#)

5. Plants are producers.



[Watch Video Solution](#)

**Revision Exercises Very Short Answer Questions
One Mark Each**

1. Who introduced the term species?



[Watch Video Solution](#)

2. Who observed bacteria for the first time?



[Watch Video Solution](#)

3. Name the rain forest in India, which was recently saved from destruction,



[Watch Video Solution](#)

4. In a traditional system followed so far, in how many kingdoms the living world was grouped?



[Watch Video Solution](#)

5. Who made the earliest attempt to classify living beings?



[Watch Video Solution](#)

6. Who wrote the books 'Species Plantarum' and 'Systema Naturae'?



[Watch Video Solution](#)

7. What is prokaryote?



[Watch Video Solution](#)

8. Who coined the term bacteria?



[Watch Video Solution](#)

9. What is Monera ?



Watch Video Solution

10. What are halophiles?



Watch Video Solution

11. Which bacterium yields tetracycline?



Watch Video Solution

12. What is denitrification?



Watch Video Solution

13. Name a bacterium which yields insecticide.



Watch Video Solution

14. What is transduction?



Watch Video Solution

15. Expand PSP



Watch Video Solution

16. Name a colourless dinoflagellate.



Watch Video Solution

17. Name the three groups of protistan algae.



Watch Video Solution

18. Which type of organisms are included in Kingdom Protista.



Watch Video Solution

19. Why the cyst is formed?



Watch Video Solution

20. Which vector spreads kala-azar?





[Watch Video Solution](#)

21. Name the vector of trypanosomiasis.



[Watch Video Solution](#)

22. What is backpackers disease?



[Watch Video Solution](#)

23. What is diatoms?





[Watch Video Solution](#)

24. Which fungus was used to kill Roman Emperor Caesar?



[Watch Video Solution](#)

25. Name the symbiotic associations in which fungi are participants.



[Watch Video Solution](#)

26. Name a fungus which is found both in unicellular and mycelial states.



[Watch Video Solution](#)

27. Define dolipore septum.



[Watch Video Solution](#)

28. Which fungus causes early blight of potato?



[Watch Video Solution](#)

29. Causal organism for Black Stem Rust of Wheat is



Watch Video Solution

30. What is morel?



Watch Video Solution

1. Give names of the 5 kingdoms proposed by Whittaker.



Watch Video Solution

2. What are producers?



Watch Video Solution

3. Into how many kingdoms, systematics has been divided from time to time?



Watch Video Solution

4. What are lichens and mycorrhiza?



Watch Video Solution

5. What are bacteriophages ?



Watch Video Solution

6. Write the names of kingdoms that include unicellular organisms and which comprise multicellular heterotrophic organisms.



[Watch Video Solution](#)

7. What is prokaryote?



[Watch Video Solution](#)

8. Highlight the criteria used for the five kingdom system of classification.



Watch Video Solution

9. What are chemoautotrophs?



Watch Video Solution

10. What is transformation of bacteria?



Watch Video Solution

11. What is lamellosome?



Watch Video Solution

12. Which types of flagella are found in dinoflagellates?



Watch Video Solution

13. What are the symptoms of amoeboid dysentery?



Watch Video Solution

14. What are trichocysts?



Watch Video Solution

15. What are sarcodines?



Watch Video Solution

16. Define Capillitium.



Watch Video Solution

17. What is rhizomorph?



Watch Video Solution

18. Define heterothallism?



Watch Video Solution

19. Why some fungi are placed in fungi imperfecti?



Watch Video Solution

20. What do you understand by holocarpic and eucarpic fungi?



Watch Video Solution

Revision Exercises Short Answer Questions Three Marks Each

1. What are the inadequacies of two kingdoms?



[Watch Video Solution](#)

2. Write the identifying traits of Monera.



[Watch Video Solution](#)

3. What are the distinguishing characters of kingdom fungi?



[Watch Video Solution](#)

4. Discuss the drawbacks of two kingdom system of classification.



[Watch Video Solution](#)

5. Write briefly on (a) mode of life in Protista
(b) nutrition in fungi.



Watch Video Solution

6. Explain the distinguishing features of
Animalia.



Watch Video Solution

7. Describe the important characters of kingdom plantae.



[Watch Video Solution](#)

8. Compare the Salient Features of Monera and Protista.



[Watch Video Solution](#)

9. Write salient features of viruses.



[Watch Video Solution](#)

10. Draw well labelled diagram of (a) Bacteria cell (b) Euglena.



[Watch Video Solution](#)

11. How Ascomycetes are different from Basidiomycetes ?



[Watch Video Solution](#)

12. Draw well labelled diagrams of (1) Bacteriophage (2) Nostoc (3) TMV.



Watch Video Solution

13. Discuss the locomotion of protists by different structures.



Watch Video Solution

14. What are the characteristic features of Euglenoids?



Watch Video Solution

15. Write the characteristics of archaebacteria...



Watch Video Solution

16. What is mycorrhiza? How this association affects the organism.



Watch Video Solution

17. Write any three differences between phycomycetes and ascomycetes.



Watch Video Solution

18. What are the criteria used to classify fungi?



[Watch Video Solution](#)

Revision Exercises Long Answer Questions Five Marks Each

1. Make an outline of the five-kingdom classification. What are the advantages and disadvantages of this classification?



[Watch Video Solution](#)

2. What kinds of organisms are grouped under Protista? Would you consider this kingdom a natural one?



Watch Video Solution

3. discuss different systems of classification briefly.



Watch Video Solution

4. Compare the Salient Features of Monera and Protista.



Watch Video Solution

5. Compare the different types of fruiting bodies in fungi.



Watch Video Solution

6. Discuss the various modes of sexual reproduction in fungi.



Watch Video Solution

7. Differentiate briefly the characteristics of Kingdom-Plantae and Animalia.



Watch Video Solution

8. Describe briefly the four major groups of Protozoa.



Watch Video Solution

9. Differentiate between ascocarp and basidiocarp.



Watch Video Solution

10. Differentiate between monera and protista.



Watch Video Solution

Competition File Objective Type Questions
Multiple Choice Questions

1. The prokaryotic cells are characterized by

- A. The presence of distinct nuclear membrane
- B. Absence of chromatic materials
- C. The presence of distinct chromosome

D. Absence of nuclear membrane

Answer: D



Watch Video Solution

2. Cell wall of bacteria and blue green algae is composed of :

A. Muramic acid

B. Chitin

C. Lipoprotein

D. Phospholipid

Answer: A



Watch Video Solution

3. Which one of the following is a symbiotic nitrogen fixer?

A. Glomus

B. Azotobacter

C. Frankia

D. Azolla

Answer: C



Watch Video Solution

4. These organisms are fungus like in one phase of their life cycle and Amoeba like in another phase of their life cycle

A. Diatoms

B. Slime molds

C. Dinoflagellates

D. Water molds

Answer: B



Watch Video Solution

5. In which of the following patterns of viral replication, viruses enter a cell, replicate and then cause the cell to burst, releasing new viruses ?

A. Lytic

B. Lysogenic

C. Reprogenic

D. Both (a) and (b)

Answer: A



Watch Video Solution

6. Carolus Linnaeus is associated with:

A. Inheritance of acquired characters

B. Binomial nomenclature

C. Law of independent assortment

D. Law of limiting factors

Answer: B



Watch Video Solution

7. Which of the following is not a correct hierarchial order?

A. Class, family, genus

B. Phylum, order, family

C. Class, order, family

D. Family, order, class

Answer: D



Watch Video Solution

8. In five-kingdom classification system, the kingdom that includes, the blue-green algae, nitrogen-fixing bacteria and methanogenic archaeobacteria is

A. Protista

B. Monera

C. Plantae

D. Fungi

Answer: B



Watch Video Solution

9. The basic unit of classification is

A. Species

B. Genius

C. Family

D. Phylum

Answer: A



Watch Video Solution

10. The term taxonomy was introduced by

A. De Candolle

B. Bentham and Hooker

C. Linnaeus

D. Huxley

Answer: C



Watch Video Solution

11. The framework system of classification in which various taxonomic categories are arranged in order or logical sequence is called.

A. Systematics

B. Classification

C. Hierarchy

D. Taxon

Answer: C



Watch Video Solution

12. Scientific study of diversity of organisms and their evolutionary relationships is called

A. Morphology

B. Anatomy

C. Taxonomy

D. Systematics

Answer: D



Watch Video Solution

13. In five kingdom classification, bacteria belong to

A. Protista

B. Monera

C. Plantae

D. Archaea

Answer: B



Watch Video Solution

14. A virus differs from a bacterium as its contains

A. A cell wall

B. Cytosol

C. DNA as genetic material

D. DNA or RNA as genetic material with no
ribosome

Answer: C



Watch Video Solution

15. select the incorrect statements

(A) lower the taxon, more are the characteristics that the members within the

taxon share

B Order is the assemblage of genera which exhibit a few similar characters

C Cat and dog are included in the same family felidae

D Binomial nomenclature was introduced by Carolus Linnaeus

A. A, B and C

B. B, C and D

C. A and D

D. B and C

Answer: D



Watch Video Solution

16. Black rot of crucifers is caused by a

A. Fungus

B. Bacterium

C. Virus

D. None of these

Answer: B



Watch Video Solution

17. Pusa Komal variety of Cow pea is resistant to disease

- A. Hill bunt
- B. White rust
- C. Leaf curl
- D. Bacterial blight

Answer: D



18. Due to which of the following organism, yield of rice is increased?

- A. Seshara
- B. *Bacillus popillige*
- C. Anabend
- D. *Bacillus subtilis*

Answer: C



19. Which of the following kingdoms includes unicellular eukaryotes?

A. Monera

B. Fungi

C. Protista

D. Plantae

Answer: C



Watch Video Solution

20. How many organism in the list given below are autotrophs Lactobacillus, Nostoc, Chara, Nitrosomonas, Nitrobacter, Streptomyces, Sacharomyces, Trypanosoma, Porphyra Wolfia

A. Four

B. Five

C. SIX

D. Three

Answer: A



Watch Video Solution

21. Trichoderma is an example of

- A. Phycomycetes
- B. Zygomycetes
- C. Deuteromycetes
- D. Basidiomycetes

Answer: C



Watch Video Solution

22. Lichen is an association between

- A. Fungi and bryophyte
- B. Fungi and algae
- C. Algae and pteridophyte
- D. Algae and bacteria

Answer: B



Watch Video Solution

23. Which class of fungi is called 'Fungi Imperfecti'?

A. Ascomycetes

B. Deuteromycetes

C. Basidiomycetes

D. Zygomycetes

Answer: B



Watch Video Solution

24. Which of the following is a pioneer in xerarch succession ?

A. Phytoplanktons

B. Lichens

C. Bryophytes

D. Rooted hydrophytes

Answer: B



Watch Video Solution

25. Choose the wrong statement regarding bacterial cell

A. Glycocalyx is the outer most envelope in bacteria

B. The glycocalyx could be a loose sheath called capsule

C. The glycocalyx may be thick and tough called slime layer

D. A special structure formed by the plasma membrane is called mesosome

E. Small bristle like fibers sprouting out of the cell are called fimbriae

A. A and C are wrong

B. A and B are wrong

C. B and C are wrong

D. A and D are wrong

Answer: C



Watch Video Solution

26. Match the following and choose the correct combination from the options given:

Column-I (Group)

- (A) Eubacteria
- (B) Dinoflagellates
- (C) Phycomycetes
- (D) Deuteromycetes

Column-II (Example)

- 1. *Trichoderma*
- 2. *Albugo*
- 3. *Gonyaulax*
- 4. *Anabaena*

A. A-1, B-2, C-3, D-4

B. A-2, B-3, C-4, D-1

C. A-4, B-3, C-2, D-1

D. A-3, B-4, C-1, D-2

Answer: C



Watch Video Solution

27. Which of the following represent maximum number of species among global biodiversity?

A. Lichens

B. Fungi

C. Mosses and ferns

D. Algae

Answer: B



Watch Video Solution

28. Which group of animals belong to the same phylum?

A. Earthworm, Pinworm, Tapeworm

B. Prawni, Scorpion, Locusta

C. Sponge, Sea anemone, Starfish

D. Malarial parasite, Amorba, Mosquito

Answer: B



Watch Video Solution

29. The motile asexual reproductive unit is called:

A. Zoospore

B. Aplanospore

C. Zygosporangium

D. Microspore

Answer: A



Watch Video Solution

30. Select the wrong statement

A. isogametes are similar in structure, function and behaviour

B. Anisogametes differ either in structure, function or behaviour

C. In Oomycetes female gamete is smaller and motile, while male gamete is larger and non-motile

D. Chlamydomonas exhibits both isogamy and anisogamy and Fucus shows

oogamy

Answer: C



Watch Video Solution

31. Viruses are non-cellular organisms but replicate themselves once they infect the host cell. To which of the following kingdom do viruses belong to ?

- A. Presence or absence of a well defined nucleus
- B. Mode of reproduction
- C. Mode of nutrition
- D. Complexity of body organisation

Answer: A



Watch Video Solution

32. Archaeobacteria differ from eubacteria in

A. Cell membrane structure

B. Mode of nutrition

C. Cell shape

D. Mode of reproduction

Answer: A



Watch Video Solution

33. The motile bacteria are also to move by

A. Fimbriae

B. Flagella

C. Cilia

D. Pili

Answer: B



Watch Video Solution

34. Viruses have

A. DNA enclosed in a protein coat

B. Prokaryotic nucleus

C. Single chromosome

D. Both DNA and RNA.

Answer: A



Watch Video Solution

35. Viruses were first Crystallised by

A. Beijerink

B. Stanley

C. Ivanowsky

D. Leeuwenhoek

Answer: B



Watch Video Solution

36. Identify the correct sequence of events in the viral replication process

- I. Eclipse II. Maturation
III. Adsorption IV. Assembly
V. Penetration VI. Lysis

A. i+ii+ii+iv+v+vi

B. loi-iii-vit-+-+vi

C. $ti+y=i+ii+iv+vi$

D. $iii+y+i+iv+ii+vi$

Answer: C



Watch Video Solution

37. Which originated first:

A. Prokaryotic cell

B. Eukaryotic cell

C. Green algae

D. None of these

Answer: A



Watch Video Solution

38. A virus can be considered living being as it

A. Respires

B. Responds to touch

C. Reproduces inside host

D. Can cause disease

Answer: C



Watch Video Solution

39. Which of the following shows coiled RNA strand and capsomeres

- A. Polio virus
- B. Retro virus
- C. Tobacco mosaic virus
- D. Measles virus

Answer: C



Watch Video Solution

40. Choose the wrong statement :

A. Morels and truffles are poisonous mushrooms.

B. Yeast is unicellular and useful in fermentation

C. Penicillium is multicellular and produces antibiotics,

D. Neurospora is used in the study of biochemical genetics.

Answer: A



Watch Video Solution

41. Chitin is a/an

A. Amino acid

B. Polysaccharide

C. Protein

D. Oligosaccharide

Answer: B



Watch Video Solution

42. Both intracellular and extracellular digestion occur in

A. Hydra

B. Aurelia

C. Amoeba

D. Planaria

Answer: A



Watch Video Solution

43. Which part of the cell can contain N-acetylglucosamine

A. Cell envelope

B. Cell wall

C. Nucleus

D. Ribosomes

Answer: B



Watch Video Solution

44. Which one is a true fish

A. Euglena

B. Amoeba

C. Monocystis

D. Giardia

Answer: A



Watch Video Solution

45. What is the range of length of sponges?

A. 1 mm - 10 mm

B. 1 cm - 1 metre

C. 1 mm - 100 mm

D. 1 metre - 10 metre

Answer: B



Watch Video Solution

46. Poterion is an example of:

A. Protozoa

B. Porifera

C. Cnidaria

D. Ctenophora

Answer: B



Watch Video Solution

47. This is not a cnidarian

A. Obelia

B. Jelly fish

C. Sea anemone

D. Berce

Answer: D



Watch Video Solution

48. Match the pairs of diseases and pathogens:

Column-I

1. Malaria
2. Filariasis
3. Typhoid
4. Schistosomiasis

Column-II

- a. *Wuchereria bancrofti*
- b. Helminth
- c. *Plasmodium falciparum*
- d. *Salmonella typhi*

A. 1-c, 2-b, 3-a, 4-d

B. 1-d, 2-2, 3-b, 4-0

C. 1-a, 2-b, 3-c, 4-d

D. 1-, 2-a, 3-d, 4-b

Answer: D



Watch Video Solution

49. Considering mode of asexual reproduction, match the column I with column II and select the correct option :

Column I	Column II
A. Yeast	i. Fragmentation
B. <i>Penicillium</i>	ii. Zoospores
C. Filamentous algae	iii. Budding
D. <i>Chlamydomonas</i>	iv. Conidia

A. A-iii, B-iv, C-i, D-ii

B. A-I, B-iii, C-i, D-iv

C. A-iv, B-111, C-1, D

D. A-iii, B-ii, C-i, D-IV

Answer: A



Watch Video Solution

50. The group of fungi that are called fungi imperfecti are :

A. Ascomycetes

B. Zygomycetes

C. Deuteromycetes

D. Basidiomycetes

Answer: C



Watch Video Solution

51. Which one of the following statements is wrong?

A. Cyanobacteria are also called blue-green algae

B. Golden algae are also called desmids

C. Eubacteria are also called false bacteria

D. Phycomycetes are also called algal fungi

Answer: C



Watch Video Solution

52. Following are the two statements regarding the origin of life :

A. The earliest organisms that appeared on the earth were non-green and presumably

anaerobes.

B. The first autotrophic organisms were the chemoautotrophs that never released oxygen.

Of the above statements which one of the following options is correct ?

A. 1 is correct but 2 is false

B. 2 is correct but 1 is false

C. Both 1 and 2 are correct

D. Both 1 and 2 are false

Answer: C



[Watch Video Solution](#)

53. Select the mismatch:

A. Rhodospirillum - Mycorrhiza

B. Anabaena - Nitrogen fixer

C. Rhizobium - Alfalfa

D. Frankia - Alnus

Answer: A



[Watch Video Solution](#)

54. Which among the following is not a prokaryote

A. Mycobacteriana

B. Nostoc

C. Saccharomyces

D. Oscillatoria

Answer: C



Watch Video Solution

Competition File Objective Type Questions Cbse Pmt Main Examination Questions

1. Differentiate between Monera and Protista based upon the following characters :

- (a) Chemical nature of cell wall
- (b) Location of respiratory apparatus
- (c) Types of cytoplasmic ribosome
- (d) Genetic material
- (e) Location of extrachromosomal DNA.



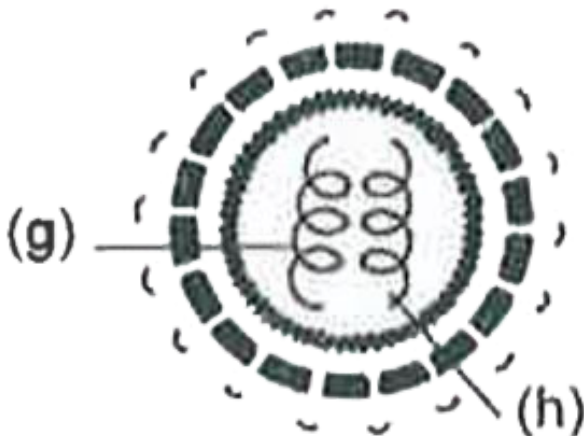
[Watch Video Solution](#)

2. Differentiate between slime mould and fungi.



[Watch Video Solution](#)

3. Identify the given diagram and also write down its two methods of transmission and label (g) or (h) also.





Watch Video Solution

Competition File Objective Type Questions C Matching Type Questions

1. Match the terms in Column A with suitable terms in Column B :

Column A	Column B
(i) Cyanobacteria	(a) Symbiosis
(ii) Diatoms	(b) Phytoplankton
(iii) Protozoa	(c) Fungi
(iv) Lichen	(d) Blue-green algae
	(e) Holozoic nutrition



Watch Video Solution

Competition File Objective Type Questions D

Assertion Type Questions

1. Assertion : Viruses are not included in any system of classification.

Reason : Viruses are non-living but develop living characters like multiplication etc. when they come in contact with suitable host.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: A



Watch Video Solution

2. Assertion : Plants manufacture food only during the day time.

Reason : During day time, metabolism is high.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: C



Watch Video Solution

3. Assertion : Bacteriophages are a type of bacteria.

Reason : Bacteria are unicellular, eukaryotic organisms.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: D



Watch Video Solution

4. Assertion : In Monera kingdom, cell wall bears unique polymers of amino sugars and amino acids called peptidoglycans.

Reason : It is a derivative of phospholipids.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: C



Watch Video Solution

5. Assertion : The photosynthetic, floating protists are collectively called phytoplanktons.

Reason : The free floating holozoic protozoans are collectively termed zooplanktons.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: B



Watch Video Solution

6. Assertion : Ernst Haeckel has classified living beings into three kingdoms.

Reason : The three kingdoms are Protista, Plantae and Animalia.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: A



Watch Video Solution

7. Assertion : The fungi are widespread in distribution and they even live on inside other plants and animals.

Reason : Fungi are able to grow anywhere on land, water or on other organisms because they have a variety of pigments, including chlorophyll, carotenoids, fucoxanthin and phycoerythrin.

A. If both Assertion and Reason are true and the Reason is a correct explanation of the Assertion.

B. If both Assertion and Reason are true but Reason is not a correct explanation of the Assertion.

C. If Assertion is true but the Reason is false.

D. If both Assertion and Reason are false.

Answer: C



Watch Video Solution

Competition File Objective Type Questions E Additional Multiple Choice Questions

1. system of classification that employs numerical data to evaluate similarities and differences is known as

A. Bio-systematics

B. Cyto-taxonomy

C. Phenetics

D. Chemotaxonomy

Answer: C



Watch Video Solution

2. Thermococcus, Methanococcus and Methanobacterium exemplify:

A. Bacteria whose DNA is relaxed or positively supercoiled but which have a cytoskeleton as well as mitochondria

B. Bacteria that contain a cytoskeleton and ribosomes

C. Archaeobacteria that contain protein homologous to eukaryotic core histones

D. Archaeobacteria that lack any histones resembling those found in eukaryotes but whose DNA is negatively supercoiled

Answer: C



Watch Video Solution

3. New systematics introduced by sir Julian Huxley is also called

A. Phenetics

B. Cladistics

C. Biosystematics

D. Numerical taxonomy

Answer: C



Watch Video Solution

4. Which of the following is an edible 'Fungi'

A. Mucor

B. Penicilliton

C. Agaricus

D. Rhizopus

Answer: C



Watch Video Solution

5. Bacteria are considered plant, because :

A. Are green in colour

B. Have rigid cell wall

C. Have chlorophyll

D. Have stomata

Answer: B



Watch Video Solution

6. Viruses possess :

A. DNA only

B. Nucleic acid, DNA or RNA

C. Protein only

D. Nucleic acid and protein

Answer: D



Watch Video Solution

7. The thalloid body of a slime mould (Myxomycetes) is known as

A. Protonema

B. Plamodium

C. Fruiting body

D. Mycelium

Answer: B



Watch Video Solution

8. Huxley is father of

A. Callsical taxonomy

B. Artificial taxonomy

C. Neo-taxonomy

D. Adansonian taxonomy

Answer: C



Watch Video Solution

9. Systema naturae was written by

A. Linnaeus

B. Aristotle

C. Hippocrates

D. Darwin

Answer: A



Watch Video Solution

10. Binomial nomenclature was first issued in :

A. Systema Naturae

B. Genera Plantarum

C. Genera Animalium

D. Historia Plantarum

Answer: A



Watch Video Solution

11. The term bacteria was coined by :

A. Leeuwenhoek

B. Louis Pasteur

C. Robert Koch

D. Ehrenberg

Answer: D



[Watch Video Solution](#)

12. The non-living characteristics of viruses is ,

- A. Ability of multiply only in the host
- B. Ability of cause disease in the host
- C. Ability to undergo mutation
- D. Ability to be crystallised

Answer: D



[Watch Video Solution](#)

13. The kingdom of prokaryotes is :

A. Protista

B. Monera

C. Fungi

D. Plantae

Answer: B



Watch Video Solution

14. Systematic botany means:

A. System analysis

B. Systematic arrangement of organs of plants

C. Systematic study of plants dealing with identification

D. Naming and classification study of plants in gardens

Answer: C



Watch Video Solution

15. Which of the following statements is false ?

A. TMV has a double stranded DNA molecules

B. Most plant viruses are RNA viruses

C. Bacteriophage has a double stranded DNA molecule

D. Most animal viruses are DNA viruses

Answer: A



Watch Video Solution

16. A phylum common to unicellular animals and plants is

A. Monera

B. Plantae

C. Fungi

D. Protista

Answer: D



Watch Video Solution

17. An example of symbiotic bacterium is

- A. *Erwinia anylovora*
- B. *Rhizobium leguminosarum*
- C. *Xanthomonas campestris*
- D. *Agrobacterium tumefaciens*

Answer: B



Watch Video Solution

18. Which one of the following are intracellular obligate parasites

A. Bacteria

B. Viruses

C. Slime moulds

D. Blue green algae

Answer: B



19. Phylum Protozoa is classified on the basis of

- A. Mode of reproduction
- B. Locomotory organelles
- C. Mode of nutrition
- D. none of these

Answer: B



20. Natural system of classification was proposed by

A. Carolus Linnaeus,

B. George Bentham and Joseph Dalton
Hooker

C. Hutchinson

D. Ernest Haeckel

Answer: B



Watch Video Solution

Chapter Practice Test

1. Are chemosynthetic bacteria autotrophic or heterotrophic ?



[Watch Video Solution](#)

2. How the saprophytic basidiomycetes are able to decompose plant matter?



[Watch Video Solution](#)

3. What is dolipore?



[Watch Video Solution](#)

4. What is dolipore?



[Watch Video Solution](#)

5. Which protistans show flagellar locomotion?



[Watch Video Solution](#)

6. Why Trypanosoma has been placed in Kingdom Protista?



[Watch Video Solution](#)

7. What are chrysophytes? Why they are considered as the chief producers in the ocean?



[Watch Video Solution](#)

8. What is capsid? How it is useful for viruses?



[Watch Video Solution](#)

9. Name the fungus which is in biological control of other fungi. How it is harmful to humans?



[Watch Video Solution](#)

10. Name the causal organisms of:

(a) Early blight

(b) Red rot of sugarcane

(c) Wilt

(d) Brown leaf spot of rice



Watch Video Solution

11. Explain the structure of bacteriophage.



Watch Video Solution

12. Discuss the various modes of sexual reproduction in fungi.



Watch Video Solution

13. Discuss the various modes of sexual reproduction in fungi.



Watch Video Solution

14. Why the taxonomy felt the need of modern taxonomy over old taxonomy?



Watch Video Solution

15. Differentiate between monera and protista.



Watch Video Solution

16. Give a brief account of viruses with respect to their structure and nature of genetic

material. Also name four common viral diseases.



Watch Video Solution