

Kingdom

1. Which of the following organisms can be found in extreme saline conditions?
 - a. Eubacteria
 - b. Archaeobacteria
 - c. Cyanobacteria
 - d. Mycobacteria
2. Linnaeus used which kingdom of classification?
 - a. Artificial system
 - b. Natural system
 - c. Phylogenetic system
 - d. Asexual system
3. Smallest taxon of classification is _____.
 - a. Kingdom
 - b. Family
 - c. Variety
 - d. Species
4. In which of the following kingdom are Archaea and Nitrogen-fixing organisms classified?
 - a. Animalia
 - b. Plantae
 - c. Monera
 - d. Fungi
5. Bentham and Hooker gave which system of classification?
 - a. Numerical
 - b. Phylogenetic
 - c. Artificial
 - d. Natural
6. What is the main basis of classification in the five-kingdom system?
 - a. Structure of the nucleus
 - b. Structure of cell wall
 - c. Asexual Reproduction
 - d. Mode of Nutrition
7. Which of the following statements is false about the fungi?

- a. They are eukaryotes
- b. They are heterotrophs
- c. They possess a purely cellulosic cell wall
- d. None of the above

8. African Sleeping Sickness is caused by _____.

- a. *Trypanozoma cruzi*
- b. *T. Tangela*
- c. *T. rhodesiense*
- d. *T. gambiense*

9. Linnaeus evolved a system of nomenclature called _____.

- a. Vernacular
- b. Monomial
- c. Polynomial
- d. Binomial

10. What is a taxon?

- a. A group of related families
- b. A type of living organisms
- c. A group of related species
- d. A group of any ranking

11. Phylogenetic classification is based on _____.

- a. Overall similarities
- b. Habit of plants
- c. Common evolutionary descendants
- d. All of these

12. Static concept of species was proposed by _____.

- a. Darwin
- b. Theophrastus
- c. Linnaeus
- d. De Candolle

13. The protists have which of the following?

- a. Free nucleic acid aggregates
- b. Nucleoprotein in direct contact with the rest of the cell substance
- c. Membrane-bound nucleoproteins within the cytoplasm
- d. Nucleoproteins condensed together in a loose mass

14. Genes of Tobacco Mosaic Virus are _____.

- a. Double-stranded RNA
- b. Single-stranded RNA
- c. Double-stranded DNA
- d. Proteinaceous

15. Blue-green algae belong to which group?

- a. Protista
- b. Prokaryotes
- c. Fungi
- d. Bryophytes

16. Who wrote the book "Genera Plantarum"?

- a. Bessey
- b. Benthem and Hooker
- c. Linnaeus
- d. Hutchinson

17. T.O. Diener discovered _____.

- a. Bacteriophage
- b. Infectious protein
- c. Free infectious DNA
- d. Free infectious RNA

18. ICBN stands for _____.

- a. International Code of Botanical Nomenclature
- b. Indian Code of Botanical Nomenclature
- c. Indian Congress of Biological names
- d. Indian Congress of Botanical Nomenclature

Answer Key

1- b	2- a	3- d	4- c	5- d	6- d
7- c	8- d	9- d	10- d	11- c	12- c
13- c	14- b	15- b	16- c	17- d	18- a

Animal Kingdom Exercise

1. Which class has the largest number of animals?

- a. Fishes
- b. Reptiles
- c. Insects
- d. Mammals

2. Identify the characteristic of acoelomates

- a. Absence of mesoderm
- b. Absence of brain
- c. Coelom that is incompletely lined with a mesoderm
- d. Solid body without a cavity surrounding internal organs

3. Salamander belongs to the class

- a. Pisces
- b. Aves
- c. Reptiles
- d. Amphibian

4. Which of the following combinations is incorrect?

- a. Nematoda- roundworms, pseudocoelomate
- b. Calcarea- gastrovascular cavity, coelom present
- c. Echinodermata- coelom present, bilateral symmetry
- d. Platyhelminthes- gastrovascular cavity, flatworms, acoelomate

5. Flame cells are the excretory structures for

- a. Annelida
- b. Coelenterates
- c. Platyhelminthes
- d. Echinodermata

6. Phylum Porifera is classified based on

- a. Branching
- b. Symmetry
- c. Spicules
- d. Reproduction

7. The canal system in sponges develops due to

- a. Porous walls

- b. Gastrovascular system
- c. Reproduction
- d. Folding of inner walls

8. Select the correct pair

- a. Arthropoda- silver fish
- b. Pisces- jelly fish
- c. Echinodermata- cuttle fish
- d. Mollusca- star fish

9. Which group does not contain polyp?

- a. Anthozoa
- b. Hydrozoa
- c. Scyphozoa
- d. Calcarea

10. Ascaris is characterized by

- a. Presence of true coelom and metamerism
- b. Presence of true coelom but the absence of metamerism
- c. Absence of true coelom and metamerism
- d. Absence of true coelom but the presence of metamerism

11. Cnidaria is characterized by

- a. Tissue level of organization
- b. Nematoblasts
- c. Coelenteron
- d. All

12. Notochord occurs throughout life and all through the length of the body in

- a. Cephalochordata
- b. Hemichordata
- c. Urochordata
- d. Vertebrata

13. *Periplaneta* belongs to which phylum?

- a. Mollusca
- b. Arthropoda
- c. Annelida
- d. Echinodermata

14. Which of the following characters is not typical to class Mammalia?

- a. Alveolar lungs
- b. Seven cervical vertebrae
- c. Thecodont dentition
- d. Ten pairs of cranial nerves

15. Radial symmetry is found in

- a. Coelenterata and Platyhelminthes
- b. Coelenterata and Echinodermata
- c. Arthropoda and Mollusca
- d. Porifera and Coelenterata

Answer Key

- | | | | | | | | |
|-------|---------|--------|--------|--------|--------|--------|-------|
| 1.(c) | 2.(d) | 3.(d) | 4.(b) | 5.(c) | 6.(c) | 7.(d) | 8.(a) |
| 9.(d) | 10. (c) | 11.(d) | 12.(a) | 13.(b) | 14.(d) | 15.(b) | |

Plant Kingdom Exercise

1. Which of the plant groups needs both land and water to complete their life cycle?

- a. Tracheophyta
- b. Pteridophyta
- c. Thallophyta
- d. Bryophyta

2. A plant that has seeds but no flowers and fruits?

- a. Bryophytes
- b. Gymnosperms
- c. Mosses
- d. Pteridophytes

3. Most primitive vascular plants?

- a. Mosses
- b. Cycads
- c. Kelps
- d. Ferns

4. Plants that possess spores and embryo but lack vascular tissues and seeds?

- a. Rhodophyta
- b. Bryophyta
- c. Pteridophyta

d. Phaeophyta

5. Which one is not an exception in angiosperms?

- a. Double fertilization
- b. Secondary growth
- c. Presence of vessels
- d. Autotrophic nutrition

6. Pteridophytes differ from mosses in

- a. Independent gametophyte
- b. Dependent gametophyte
- c. Flagellate antherozoids
- d. Independent and dominant sporophyte

7. Angiosperms are the dominant flora because of

- a. Domestication by man
- b. Power of adapting in diverse habitats
- c. Self-pollination property
- d. Property of producing a large number of seeds

8. Plants reproducing by spores are grouped under

- a. Bryophytes
- b. Sporophytes
- c. Cryptogams
- d. Thallophytes

9. Plants having vascular tissue without seeds

- a. Angiosperm
- b. Pteridophytes
- c. Bryophytes
- d. Gymnosperms

10. The plant group that possesses the largest ovule, largest gametes, and largest tree

- a. Angiosperms
- b. Gymnosperms
- c. Pteridophytes
- d. Bryophytes

11. Zygotic meiosis is the characteristic of

- a. Fucus
- b. Funaria

- c. Marchantia
- d. Chlamydomonas

12. Pick the mismatched pair

- a. Cycas – Dioecious
- b. Equisetum – Homosporous
- c. Salvinia – Heterosporous
- d. Pinus – Dioecious

13. A colonial alga is

- a. Volvox
- b. Chlorella
- c. Ulothrix
- d. Spirogyra

14. Double fertilization is the characteristic of

- a. Algae
- b. Gymnosperms
- c. Fungi
- d. Angiosperms

15. Conifers can tolerate extreme environments because of

- a. Presence of vessels
- b. Thick cuticle
- c. Superficial stomata
- d. Broad hardy leaves

16. First plants to inhabit the land

- a. Angiosperms
- b. Bryophytes
- c. Gymnosperms
- d. Pteridophytes

17. Agar is commercially obtained from

- a. Blue-green algae
- b. Red algae
- c. Brown algae
- d. Green algae

18. Which one differs from Spirogyra based on its nucleus?

- a. Azygospore

- b. Zygospor
- c. Akinete
- d. Aplanospore

19. The cell wall of Spirogyra contains

- a. Cellulose
- b. Chitin
- c. Lignin
- d. Suberin

20. Which of the following completely lacks cell wall?

- a. Blue-green algae
- b. Saccharomyces
- c. Sea-fan
- d. Cyanobacteria

21. Prothallus gives rise to sporophyte without fertilization. This is known as

- a. Apogamy
- b. Parthenocarp
- c. Parthenogenesis
- d. Apospory

22. Chromatophores participate in

- a. Photosynthesis
- b. Respiration
- c. growth
- d. Movement

23. Which one is responsible for the formation of peat?

- a. Riccia
- b. Sphagnum
- c. Marchantia
- d. Funaria

24. Isogamous condition with non-flagellated gametes is found in

- a. Chlamydomonas
- b. Volvox
- c. Spirogyra
- d. Fucus

25. The exine of pollen grain comprises

- a. Pectin and cellulose
- b. Lignocellulose
- c. Pollenkit
- d. Sporopollenin

26. Meiosis occurs in

- a. Conidia
- b. Meiocyte
- c. Megaspore
- d. Gemmule

27. An evolutionary important character of Selaginella is

- a. Strobili
- b. Rhizophore
- c. Heterosporous nature
- d. Ligule

28. Which is the common characteristic of multicellular fungi, filamentous algae and protonema of mosses?

- a. Mode of nutrition
- b. Diplontic life cycle
- c. Multiplication by fragmentation
- d. Members of Plant Kingdom

29. Vascular bundles are not found in

- a. Gymnosperms
- b. Pteridophytes
- c. Angiosperms
- d. Bryophytes

30. The transport of male gametes in bryophytes and pteridophytes occurs through

- a. Wind
- b. Water
- c. Birds
- d. Insects

Answer Key

1- d	2- b	3- d	4- b	5- a	6- d	7- b	8- c
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17- b	18- b	19- a	20- c	21- a	22- a	23- b	24- c
25- d	26- b	27- c	28- c	29- d	30- b		