

8th Science Lesson 7 Questions in English

7] Plant Kingdom

1. Which of the following are different in living organisms?

- 1) Habit
- 2) Habitat
- 3) Mode of nutrition
- 4) Physiology
 - a) 1, 2, 4
 - b) 2, 3, 4
 - c) 1, 3, 4
 - d) All the above

Explanation

The living organisms found on the earth are **different in their structures, habit, habitat, mode of nutrition and physiology**. The estimated number of species on the earth is 8.7 million.

2. How many species are living on land?

- a) 6.5 million
- b) 2.5 million
- c) 8.7 million
- d) 4 million

Explanation

The estimated number of species on the earth is 8.7 million. Among them **6.5 million (1 million =10 lacks) species are living on land**, 2.2 million species in the ocean. In these 4,00,000 species are flowering plants.

3. Which of the following are included in plant kingdom?

- 1) Thallophytes
- 2) Bryophytes
- 3) Pteridophytes
- 4) Gymnosperms
 - a) 1, 2, 3
 - b) 1, 3, 4
 - c) 2, 3, 4
 - d) All the above

Explanation

The living organisms show lot of similarities and differences so that they can be arranged into many groups systematically. The **plant kingdom** includes **thallophytes, bryophytes, pteridophytes, gymnosperms and angiosperms**.

4. Taxonomy is the branch of biology that deals with the study of_____

- 1) Identification
 - 2) Description
 - 3) Classification
 - 4) Nomenclature
- a) 4 alone
 - b) 1, 2
 - c) 2, 3, 4
 - d) **All the above**

Explanation

Taxonomy is the branch of biology that deals with the **study of identification, classification, description and nomenclature of living organisms**.

5. The word 'Taxonomy' was first coined by_____

- a) Carolus Linnaeus
- b) **Augustin-Pyramus de Candolle**
- c) Bentham and Hooker
- d) Karl Marx

Explanation

The word taxonomy is derived from two Greek words (Taxis: arrangement and Nomos: laws.) The word '**Taxonomy**' was **first coined by Augustin-Pyramus de Candolle**.

6. How many types of classification are there?

- a) 2
- b) 3
- c) 6
- d) **4**

Explanation

There are four types of classification.

1. Artificial system of classification 2. Natural system of classification 3. Phylogenetic system of classification 4. Modern system of classification

7. _____is the earliest system of classification in plants

- a) **Artificial system of classification**
- b) Phylogenetic system of classification
- c) Natural system of classification
- d) Modern system of classification

Explanation

Artificial system of classification is the **earliest system of classification in plants**. Plants are classified on the basis of one or few morphological characters

8. Who proposed artificial system of classification?

- a) **Carolus Linnaeus**
- b) Augustin-Pyramus de Candolle
- c) Bentham and Hooker
- d) Karl Marx

Explanation

The most **famous artificial system of classification** is **Linnaeus classification** which was proposed by **Carolus Linnaeus** in Species plantarum.

9. _____ classification is an example of Natural System of Classification.

- a) Carolus Linnaeus
- b) Augustin-Pyramus de Candolle
- c) **Bentham and Hooker**
- d) Nino de Cuna

Explanation

In this system, plants are classified on the basis of several characters. **Bentham and Hooker's classification is an example of Natural System of Classification**. This system of classification is based on morphological and reproductive characters of the seeded plants.

10. Who published their book named Genera Plantarum in 3 volumes?

- a) Carolus Linnaeus
- b) Augustin-Pyramus de Candolle
- c) **Bentham and Hooker**
- d) Nino de Cuna

Explanation

Bentham and Hooker published their **Natural system of Classification** in their book named Genera Plantarum in 3 volumes.

11. _____ is defined as the collection of pressed, dried plants pasted on a sheet and arranged according

to any one of the accepted systems of classification

- a) Bonsai
- b) **Herbaria**
- c) Dela curzo
- d) Berlio

Explanation

Natural system of classification is widely used in many Herbaria (**herbarium** is defined as the collection of pressed, dried plants pasted on a sheet and arranged according to any one of the accepted systems of classification) and botanical gardens all over the world.

12. The division spermatophyta are divided into_____ classes

- a) 3
- b) 4
- c) 5
- d) 6

Explanation

The division **spermatophyta** are divided into 3 classes:

- Dicotyledonae
- Gymnospermae
- Monocotyledonae

13. Which of the following statement about Dicotyledonae is correct?

- 1) seed has two cotyledons
 - 2) Fibrous root system is present
 - 3) Flowers are tetramerous or pentamerous
- a) 1, 2
 - b) **1, 3**
 - c) 2, 3
 - d) All the above

Explanation

Dicotyledonae:

- Seed has two cotyledons.
- Leaves have reticulate venation

- **Tap root system** is present.
- Flowers are tetramerous or pentamerous

14. Which of the following plant class have no fruit?

- a) Dicotyledonae
- b) Gymnospermae**
- c) Monocotyledonae
- d) All the above

Explanation

Gymnospermae (Naked seed plants):

- Plants of this class have no fruit.
- It has three families, they are
 - 1. Cycadaceae
 - 2. Coniferae
 - 3. Gnetaceae

15. Which of the following statement about Monocotyledonae is correct?

- 1) Leaves have reticulate venation
 - 2) Fibrous root system is present
 - 3) Flowers are Trimerous
- a) 1, 2
 - b) 1, 3
 - c) 2, 3**
 - d) All the above

Explanation

Monocotyledonae:

- Seed has single cotyledon.
- **Leaves have parallel venation.**
- Fibrous root system is present
- Flowers are Trimerous

16. Binomial name of mango is_____

- a) Mangifera indica**
- b) Solanum tuberosome
- c) Mangifera sativa
- d) Solanum indica

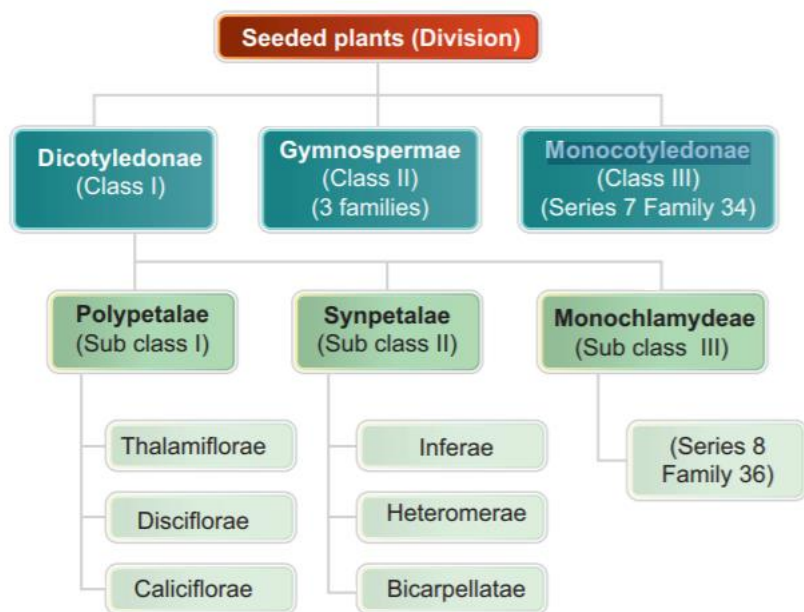
Explanation

The naming of an organisms with two words are known as Binomial Nomenclature. For example, the **binomial name of mango is *Mangifera indica***.

17. Thalamiflorae comes under_____

- a) **Dicotyledonae**
- b) Gymnospermae
- c) Monocotyledonae
- d) All the above

Explanation



18. Binomial system had been properly made used by_____

- a) **Carolus Linnaeus**
- b) Augustin-Pyramus de Candolle
- c) Bentham and Hooker
- d) Nino de Cuna

Explanation

Binomial system had been **properly made used by Linnaeus** in his book, "**Species Plantarum.**" The naming of an organisms with two words are known as Binomial Nomenclature.

19. Binomial name was first introduced by_____

- a) Carolus Linnaeus
- b) Augustin-Pyramus de Candolle
- c) Bentham and Hooker

d) **Gaspard Bauhin**

Explanation

The system of naming the plants on scientific basis is known as Botanical nomenclature. **Binomial name** was first introduced by **Gaspard Bauhin** in the year of 1623.

20. Largest Herbarium of India is in_____

- a) Chennai
- b) Mumbai
- c) **Kolkata**
- d) Lucknow

Explanation

Largest Herbarium of India is in **Kolkata**, which has more than 10,00,000 (one million) species of herbarium specimens.

21. _____ are chlorophyll bearing simple, primitive plants and are autotrophs.

- a) **Algae**
- b) Virus
- c) Bacteria
- d) Protozoan

Explanation

Algae are **chlorophyll bearing simple, primitive plants and are autotrophs**. Most of the algae are living in aquatic region. It may be fresh water or marine water. Very few algae can survive in terrestrial conditions.

22. Algae belongs to_____

- a) Bryophytes
- b) **Thallophytes**
- c) Pteridophytes
- d) Gymnosperms

Explanation

Algae belongs to **Thallophyta**, and the plant body of algae are called thallus. i.e. the plant body is not differentiated into root, stem and leaf.

23. Algae floating on water are called as_____

- a) **Phytoplankton**

- b) Zooplankton
- c) Lichen
- d) All the above

Explanation

Some **algae are very minute and float on the surface of the water**. These algae are called **Phytoplankton**.

24. What is the full form of ICBN?

- a) **International Code of Botanical Nomenclature**
- b) Indian Council of Botanical Nomenclature
- c) Indian Code of Botanical Nomenclature
- d) International Code of Binomial Nomenclature

Explanation

The rules and recommendations regarding binomial nomenclature were found in **ICBN (International Code of Botanical Nomenclature)** now it is known as **ICN (International Code of Nomenclature)**.

25. Algae living with fungi are called as_____

- a) **Symbionts**
- b) Epiphytes
- c) Saprophytes
- d) Parasites

Explanation

Some of the algae are **symbionts (algae living with fungi and they both are mutually benefitted)**. e.g. Lichen. A few species of them are epiphytes (growing on another plants).

26. Unicellular motile algae_____

- a) Chlorella
- b) Spirogyra
- c) **Chlamydomonas**
- d) Cladophora

Explanation

Plant body of the algae are unicellular or multicellular. **Unicellular motile (Chlamydomonas)**, nonmotile. (Chlorella).

27. Multicellular unbranched filaments algae_____

- a) Chlorella
- b) Spirogyra**
- c) Chlamydomonas
- d) Cladophora

Explanation

Multicellular unbranched filaments (Spirogyra) and branched filaments (Cladophora). Some algae are giant kelp – Macrocystis. Some algae are living as colonial form – Volvox. Alga like Chara resembles largest plant body and it possess well developed sex organs.

28. Match the following with algae with their method of reproduction:

- | | |
|----------------------------|------------------|
| I. Vegetative reproduction | 1. Chara |
| II. Asexual reproduction | 2. Spirogyra |
| III. Sexual reproduction | 3. Chlamydomonas |
- a) 2, 1, 3
 - b) 2, 3, 1**
 - c) 1, 3, 2
 - d) 3, 1, 2

Explanation

Three types of reproduction are seen in algae:

- **Vegetative** reproduction by fragmentation e.g. **Spirogyra**.
- **Asexual reproduction** by spore formation e.g. **Chlamydomonas**.
- **Sexual** reproduction by means of fusion of gametes e.g. Spirogyra, **Chara**

29. Match the following:

- | | |
|--------------------|------------------|
| I. Bluegreen algae | 1. Fucoxanthin |
| II. Green algae | 2. Phycocyanin |
| III. Brown algae | 3. Chlorophyll |
| IV. Red algae | 4. Phycoerythrin |
- a) 3, 1, 2, 4
 - b) 2, 3, 1, 4**
 - c) 2, 1, 3, 4
 - d) 4, 2, 1, 3

Explanation

Class - Type of pigment

Bluegreen algae – Phycocyanin

Green algae – Chlorophyll

Brown algae – Fucoxanthin

Red algae – Phycoerythrin

30. Match the following

- | | |
|--------------------|------------------|
| I. Bluegreen algae | 1. Rhodophyceae |
| II. Green algae | 2. Chlorophyceae |
| III. Brown algae | 3. Phaeophyceae |
| IV. Red algae | 4. Cyanophyceae |
- a) 4, 1, 2, 3
b) 4, 1, 3, 2
c) **4, 2, 3, 1**
d) 1, 2, 4, 3

Explanation

- Bluegreen algae (Cyanophyceae)
- Green algae (Chlorophyceae)
- Brown algae (Phaeophyceae)
- Red algae (Rhodophyceae)

31. Match the following algae class with their Reserve food material:

- | | |
|--------------------|----------------------------------|
| I. Bluegreen algae | 1. Starch |
| II. Green algae | 2. Cyanophycean Starch |
| III. Brown algae | 3. Laminarian starch and Manitol |
| IV. Red algae | 4. Floridian Starch |
- a) **2, 1, 3, 4**
b) 1, 2, 3, 4
c) 1, 3, 4, 2
d) 3, 1, 2, 4

Explanation

- Bluegreen algae (Cyanophyceae) - Cyanophycean Starch
- Green algae (Chlorophyceae) - Starch
- Brown algae (Phaeophyceae)- Laminarian starch and Manitol
- Red algae (Rhodophyceae)- Floridian Starch

32. Which of the following algae are consumable?

- 1) Ulva
- 2) Chlorella
- 3) Spirulina

- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) All the above

Explanation

Algae are consumed as food by the people in Japan, England and also in India. e.g. **Ulva, Spirulina, Chlorella** etc. Some algae are used as a food for domestic animals. e.g. Laminaria, Ascophyllum.

33. _____algae are essential for the fixing of atmospheric nitrogen into the soil

- a) Green
- b) **Blue green**
- c) Brown
- d) Red

Explanation

Some of the **blue green algae** are essential for the fixing of atmospheric nitrogen into the soil, which increases the fertility of the soil. e.g. Nostoc, Anabaena.

34. Agar Agar is extracted from _____ algae

- a) Green
- b) **Blue green**
- c) Brown
- d) Red

Explanation

Agar Agar is extracted from some red algae, namely Gelidium, Gracillaria, etc., which is used to prepare growth medium in laboratories.

35. _____is used in space travel to get rid of CO₂ and decompose human wastes

- a) Ascophyllum
- b) Laminaria
- c) **Chlorella pyrenoidosa**
- d) Gelidium

Explanation

Chlorella pyrenoidosa is used in space travel to get rid of CO₂ and decompose human wastes. Iodine is obtained from brown algae like Laminaria (kelp).

36. Fungi (singular – fungus) belongs to_____

- a) Bryophyta
- b) **Thallophyte**
- c) Pteridophyte
- d) None

Explanation

Fungi (singular – fungus) belongs to thallophyta because the plant body is not differentiated into root, stem, and leaves.

37. Which of the following statement is correct?

- 1) The plant body of fungus consists of filament like structures called as hyphae
 - 2) Several hyphae arranged in the form of network called mycelium.
 - 3) There are three types of mycelium found in fungi, namely septate mycelium and aseptate mycelium.
- a) **1, 2**
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

The plant body of fungus consists of filament like structures called as hyphae. Several hyphae arranged in the form of network called mycelium. **There are two types of mycelium found in fungi**, namely septate mycelium and aseptate mycelium.

38. If the cross wall is seen between the cell, it is called_____

- a) **Septate mycelium**
- b) Aseptate mycelium
- c) Coenocytic mycelium
- d) None

Explanation

If the **cross wall is seen between the cell, it is called septate mycelium**. If the cross wall is not seen, it is called aseptate mycelium. When aseptate mycelium contains many nuclei, it is called as coenocytic mycelium .

39. Yeast cells are_____ and_____ organisation

- a) **Unicellular, Eukaryotic**
- b) Multicellular, Eukaryotic

- c) Multicellular, Prokaryotic
- d) Unicellular, Prokaryotic

Explanation

The cells of fungi are multicellular and eukaryotic organisation. Some species of **fungi like yeast is unicellular and eukaryotic cell.**

40. Cell wall of fungi is made up of_____

- a) Cellulose
- b) Cytoplasm
- c) **Chitin**
- d) Flagella

Explanation

Cell wall of fungi is made up of a chemical substance called **chitin**. The reserve food materials of fungi are glycogen and oil.

41. Fungi are_____

- 1) Parasites
- 2) Saprophytes
- 3) Symbionts
- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) **All the above**

Explanation

Fungi have no starch because they have no chlorophyll pigments. So, they are heterotrophs. Heterotrophs are of three types called **parasites, saprophytes and symbionts.**

42. Which of the following statement is incorrect?

- 1) Parasites absorbs food from the living organisms with the help of special root called haustoria
- 2) Cercospora personata affects groundnut plants and cause Tikka disease
- a) 1 alone
- b) 2 alone
- c) 1, 2
- d) **None**

Explanation

Parasites absorb food from the living organisms with the help of special root called haustoria. e.g. *Cercospora personata*. It affects groundnut plants and cause Tikka disease.

43. _____ grow up on the dead and decay matters

- a) Parasites
- b) **Saprophytes**
- c) Symbionts
- d) All the above

Explanation

Heterotrophs are of three types called parasites, saprophytes and symbionts. **Saprophyte** grow up on the dead and decay matters and get food from them. e.g. *Rhizopus*.

44. Fungi living symbiotically with higher plants roots called _____

- a) Lichen
- b) **Mycorrhizae**
- c) *Rhizopus*
- d) *Cercospora*

Explanation

Some species of fungi living with algae and are mutually benefitted. e.g. Lichen. Some fungi live symbiotically with higher plants roots called **Mycorrhizae**

45. Which of the following anti-biotic are obtained from fungi?

- 1) Erythromycin
- 2) Penicillin
- 3) Neomycin
- a) 1, 2
- b) 1, 3
- c) 2, 3
- d) **All the above**

Explanation

Penicillin (*Penicillium notatum*), **Neomycin**, **Gentamycin**, **Erythromycin** are some antibiotics obtained from fungi, which cure variable diseases.

46. Mushroom contains rich _____

- 1) Protein
- 2) Vitamin B
- 3) Minerals

- a) 1, 2
- b) 1, 3**
- c) 2, 3
- d) All the above

Explanation

Mushroom contains **rich protein and minerals**. The most common edible mushroom is Agaricus. (Button mushroom).

47. Which of the following is used to produce vitamin B₂?

- a) Mycorrhizae
- b) Lichen
- c) Ashbya gossypii**
- d) Penicillium notatum

Explanation

Fungus like **Ashbya gossypii** and **Erythroascus mycelium** are used to produce vitamin B₂ (riboflavin). Fungus like yeast contain enzymes invertase and zymase, which ferment the sugar molasses into alcohol.

48. Who placed fungus as 3rd kingdom in 5 kingdom classification?

- a) Charles Darwin
- b) RH Wittekar**
- c) Louis Martin
- d) W. Martin

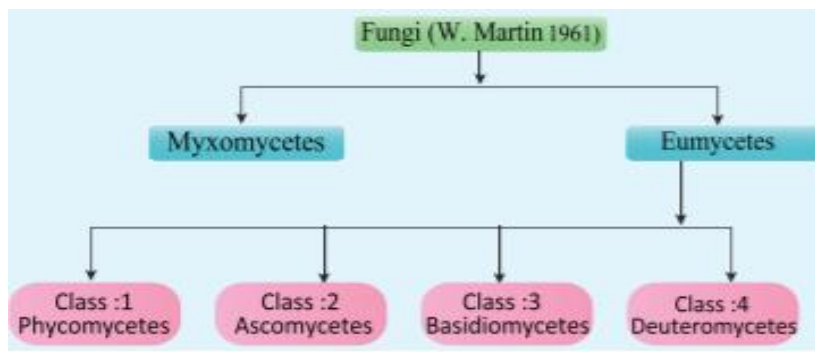
Explanation

Fungi placed as **third kingdom** in RH Wittekar's five kingdom classification because absence of chlorophyll and starch.

49. When did W. Martin classified fungi?

- a) 1991
- b) 1961**
- c) 1962
- d) 1996

Explanation



50. Match the following

- | | |
|------------------------------------|---------------------------|
| I. <i>Fusarium oxisporam</i> | 1. White rust of radish |
| II. <i>Colletotrichum falcatum</i> | 2. Wilt disease of cotton |
| III. <i>Pyricularia oryzae</i> | 3. Red rot of sugar cane |
| IV. <i>Albugo candida</i> | 4. Blast disease of paddy |
- a) 2, 1, 3, 4
 b) 2, 3, 4, 1
 c) 3, 2, 1, 4
 d) 1, 2, 4, 3

Explanation

S. No.	Pathogen	Name of the Disease
1	<i>Fusarium oxisporam</i>	Wilt disease of cotton
2	<i>Cercospora personata</i>	Tikka disease of ground nut
3	<i>Colletotrichum falcatum</i>	Red rot of sugar cane
4	<i>Pyricularia oryzae</i>	Blast disease of paddy
5	<i>Albugo candida</i>	White rust of radish

51. Which of the following gives greatest damages to the frustrated youth by giving unreal, extraordinary lightness?

- a) *Aspergillus*
 b) *Cladosporium*
 c) *Claviceps purpuriya*
 d) *Albugo candida*

Explanation

Claviceps purpuriya is the hallucinogenic fungi causes greatest damages to the frustrated youth by giving unreal, extraordinary lightness and hovering sensations

52. _____ species cause allergy to children

- a) **Aspergillus**
- b) Cladosporium
- c) Claviceps purpuriya
- d) Albugo candida

Explanation

Aspergillus species cause allergy to children while Cladosporium protects against allergy. Fungus like yeast contain enzymes invertase and zymase, which ferment the sugar molasses into alcohol.

53. Match the following

- | | |
|------------------------|------------------|
| I. Trichophyton sp | 1. Ring worm |
| II. Microsporum furfur | 2. Athletes foot |
| III. Tinea pedis | 3. Dandruff |
- a) 1, 3, 2
 - b) 1, 2, 3
 - c) 3, 1, 2
 - d) 2, 1, 3

Explanation

S. No.	Name of the Fungi	Name of the Disease
1	<i>Trichophyton sp.</i>	Ring worm (Circular rash on the skin) 
2	<i>Microsporum furfur</i>	Dandruff 
3	<i>Tinea pedis</i>	Athletes foot 

54. Which of the following statement is incorrect?

- 1) Bryophytes are the primitive and simplest group of land plants.
- 2) These are terrestrial and non-vascular cryptogams
 - a) 1 alone
 - b) 2 alone
 - c) 1, 2
 - d) **None**

Explanation

- Bryophytes are the primitive and simplest group of land plants.
- These are terrestrial and non-vascular cryptogams (they have no vascular tissues like xylem, phloem).

55. Queen of medicine is_____

- a) Neomycin
- b) **Penicillin**
- c) Erythromycin
- d) Gentamycin

Explanation

Queen of medicine is Penicillin, discovered by Sir Alexander Fleming in 1928. Fungi are heterotrophs.

56. Which of the following is called as amphibians of plant kingdom?

- a) Thallophyte
- b) **Bryophyte**
- c) Pteridophyte
- d) All the above

Explanation

Water is essential to complete their life cycle, so **Bryophyte plants** are called **amphibians of the Plant Kingdom**.

57. Which of the following statement about Bryophyte is correct?

- 1) Sexual reproduction is oogamous type
- 2) The male sex organ is antheridium, which produces antherozoid.
- 3) The female sex organ is archegonium which contains an egg.
 - a) 1, 2
 - b) 1, 3
 - c) 2, 3

d) All the above

Explanation

General Characters of Bryophytes:

- Sexual reproduction is oogamous type
- The male sex organ is antheridium, which produces antherozoid.
- The female sex organ is archegonium which contains an egg.

58. _____ is the first cell which develops into sporophytic generation

- Nematode
- Zygote**
- Antheridia
- Archegonia

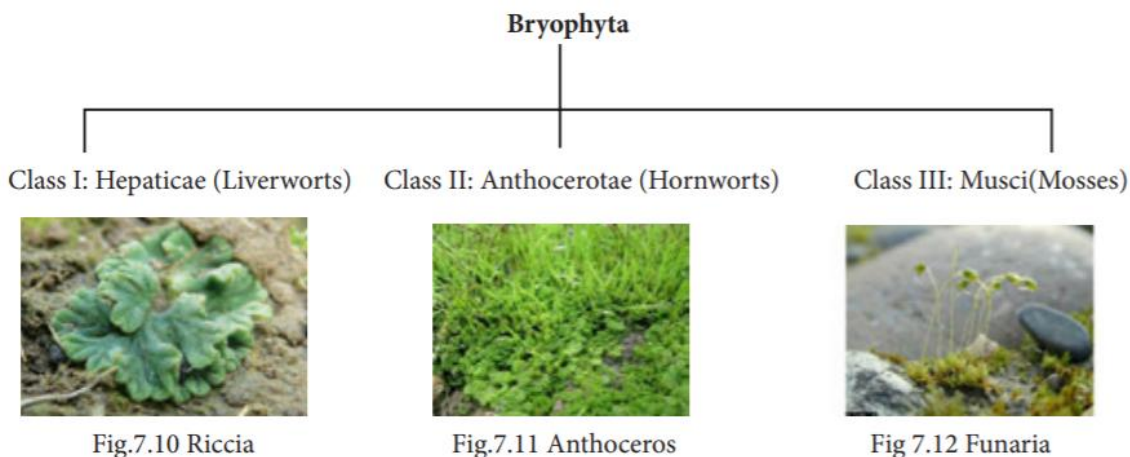
Explanation

Zygote is the first cell which develops into sporophytic generation and produce haploid spore (n) by meiosis. Spore is the first cell of the gametophytic generation.

59. Match the following

- | | |
|------------------|---------------|
| I. Hepaticae | 1. Funaria |
| II. Anthocerotae | 2. Riccia |
| III. Musci | 3. Anthoceros |
- 2, 1, 3
 - 2, 3, 1**
 - 1, 3, 2
 - 3, 2, 1

Explanation



60. Which of the following statement about Hepaticae is correct?

- 1) These are lower forms of bryophytes
 - 2) Protonemal stage is absent
 - 3) Sporophyte is very simple and short lived.
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Class I: Hepaticae (e.g. Riccia)

- These are **lower forms of bryophytes**. They are simple in structure than moss.
- **Protonemal stage is absent**. Sporophyte is very **simple and short lived**.

61. Which of the following statement about Anthocerotae is correct?

- 1) Gametophyte is undifferentiated thallus, rhizoids are unicellular and unbranched
 - 2) Protonemal stage is present
 - 3) Sporophyte is differentiated into foot and capsule only
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Class-II: Anthocerotae

- Gametophyte is undifferentiated-thallus, rhizoids are unicellular and unbranched.
- **Protonemal stage is absent**. Sporophyte is differentiated into foot and capsule only.

62. Which of the following are economic importance of Bryophytes?

- 1) Bryophytes prevent the soil erosion
 - 2) Sphagnum can absorb large amount of water.
 - 3) Peat is a valuable fuel like coal obtained from Sphagnum.
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) All the above

Explanation

Economic Importance of Bryophytes:

- Bryophytes prevent the soil erosion.
- Sphagnum can absorb large amount of water. Hence, it is used by the gardeners in nursery
- Peat is a valuable fuel like coal obtained from Sphagnum.

63. ____ moss was once used in disposable diapers

- a) Penicillium
- b) **Sphagnum**
- c) Lichen
- d) Riccia

Explanation

Sphagnum moss was once **used in disposable diapers**, because it soaks liquid well. Sphagnum is used in horticulture.

64. ____ are the first true land plants with xylem and phloem

- a) Bryophyte
- b) Thallophyte
- c) **Pteridophyte**
- d) None

Explanation

Pteridophytes are the **first true land plants with xylem and phloem**. Hence it is called vascular cryptogams.

65. Which of the following statement about pteridophyte is correct?

- 1) The main plant body is sporophytes, which is the dominant phase, differentiated into true root, stem and leaves.
 - 2) The sporangia bearing leaves are called sporophyll.
 - 3) Sporophytes reproduce by means of spores. Spores are produced in sporangium
- a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) **All the above**

Explanation

General Characters of Pteridophyte:

The main plant body is sporophytes, which is the dominant phase, differentiated into true root, stem and leaves. Sporophytes reproduce by means of spores. **Spores are produced in sporangium.** The sporangia bearing leaves are called sporophyll.

66. _____ are used as ornamental plants

- a) Lichens
- b) Mosses
- c) **Ferns**
- d) Rhizome

Explanation

Ferns are used as ornamental plants. The rhizome and petioles of the Dryopteris yield the vermifuge drug.

67. _____ is known as club moss

- a) Lichens
- b) Mosses
- c) Ferns
- d) **Lycopodium**

Explanation

Lycopodium, is known as **club moss**. Equisetum is known as horse tail. The sporocarp of Marsilea (water fern) is used as food by tribal people.

68. _____ are naked seed plants

- a) **Gymnosperms**
- b) Angiosperms
- c) Bryophyte
- d) Pteridophyte

Explanation

Gymnosperm are naked seed plant, i.e. the ovule is not enclosed by ovary. Gymnosperms have two phases in its life cycle. (Sporophytic and Gametophytic)

69. Which of the following statement about Gymnosperm?

- 1) Plant body is sporophyte dominant which is differentiated into root, stem and leaf
 - 2) The water conducting tissue is tracheid.
 - 3) They have cone on which sporangia and spores are produced.
- a) 1, 2
 - b) 1, 3

- c) 2, 3
- d) All the above

Explanation

General Characters of Gymnosperms:

- Plant body is **sporophyte dominant** which is differentiated into root, stem and leaf.
- They have well developed **vascular tissues. (xylem and phloem)**
- The **water conducting tissue is tracheid**. Food conducting tissue is sieve cell
- They have cone on which sporangia and spores are produced.

70. Which of the following statement is correct?

- 1) Woods of many conifers are used in the paper industries. e.g. Pinus, Agathis
 - 2) Conifers are the sources of soft wood for construction, packing and plywood industry e.g. Cedrus, Agathis
- a) 1 alone
 - b) 2 alone
 - c) 1, 2
 - d) None

Explanation

Economic Importance of Gymnosperms:

- Woods of many conifers are used in the paper industries. e.g. Pinus, Agathis
- Conifers are the sources of soft wood for construction, packing and plywood industry e.g. Cedrus, Agathis

71. _____ is an essential oil used for paint preparation extracted from the resin of Pinus

- a) Olive
- b) **Turpentine**
- c) Gingelly
- d) All the above

Explanation

Turpentine is an essential oil used for paint preparation extracted from the resin of Pinus. It is also used medicinally to get relief from pain and bronchitis etc.,

72. _____ is an ornamental plant.

- a) **Pinus gerardiana**
- b) Ephedra
- c) Araucaria bidwillii

d) None

Explanation

- **Seeds of Pinus gerardiana are edible.**
- Ephedrine is an alkaloid extracted from Ephedra. It cures asthma and respiratory problems.
- Araucaria bidwillii is an ornamental plant.

73. What does the term angio mean in angiosperms?

- a) Open
- b) Closed**
- c) Semi closed
- d) Empty

Explanation

The term 'Angiosperm' is derived from two Greek words, i.e. 'Angio' which means box or closed and 'sperma' which means seed.

74. _____ are called flowering plants

- a) Angiosperms**
- b) Gymnosperms
- c) Bryophylum
- d) Pteridophyte

Explanation

Angiosperms are called flowering plants. In this group more than 4,00,000 living species are found. They occupy every habitat on earth except extreme environment. (extreme hot and cold conditions).

75. Which of the following Leaves are pinnately compound forming a crown?

- a) Cycadales**
- b) Ginkgoales
- c) Coniferales
- d) Gnetales

Explanation

Cycadales eg: <i>Cycas</i> sps
Palm like small plants (erect and unbranched)
Leaves are pinnately compound forming a crown.
Tap root system and Coralloid root.


76. Which of the following produce unpleasant smell?

- a) Cycadales
- b) **Ginkgoales**
- c) Coniferales
- d) Gnetales

Explanation

Ginkgoales eg: <i>Ginko biloba</i>
<i>Ginko biloba</i> is the only living species in the group.
It is a large tree with fan shaped leaves.
They produce unpleasant smell.

77. Which of the following Seeds are winged and produced in female cone?

- a) Cycadales
- b) **Ginkgoales**

- c) **Coniferales**
- d) Gnetales

Explanation

Coniferales eg: <i>Pinus sps</i>
Evergreen trees with cone like appearance.
Needle like leaves or scale leaves.
Seeds are winged and produced in female cone.

78. Which of the following possesses advanced characters like Angiosperm?

- a) Cycadales
- b) Ginkgoales
- c) Coniferales
- d) **Gnetales**

Explanation

Gnetales eg: <i>Gnetum sps</i>
Small group of plants.
It possesses advanced characters like Angiosperm
Ovules are naked but, developed on flower like shoot.

79. Which of the following is not found in xylem?

- a) **Sieve tubes**
- b) Tracheid
- c) Xylem fibre

d) Xylem parenchyma

Explanation

Xylem contains vessel, tracheid, xylem parenchyma and xylem fibre. **Phloem** contains **sieve tubes**, phloem parenchyma, companion cells and phloem fibres.

80. Which of the following are the Characteristic features of monocotyledons?

- 1) Seed has only one cotyledon
- 2) Pollination occurs mostly by wind.
- 3) Flowers are trimerous and not differentiated in to calyx and corolla.
 - a) 1, 2
 - b) 1, 3
 - c) 2, 3
 - d) **All the above**

Explanation

Characteristic features of monocotyledons:

- Seed has only one cotyledon.
- Plants have fibrous root system, leaves with parallel venation.
- Flowers are trimerous and not differentiated in to calyx and corolla.
- Pollination occurs mostly by wind.
- E.g. Grass, Paddy, Banana.

81. Which of the following is not a dicotyledon?

- a) Neem
- b) Mango
- c) Bean
- d) **Rice**

Explanation

Characteristic features of Dicotyledons:

- Seed has two cotyledons.
- Plants have tap root system, leaves with reticulate venation.

Flowers are tetramerous or pentamerous. Calyx and corolla are well differentiated.

- Pollination occurs mostly by insects.
- E.g. **Bean, Mango, Neem**

82. Acalypha indica belongs to_____

- a) **Euphorbiaceae**
- b) Rutaceae
- c) Oraziyae
- d) Liliaceae

Explanation

Acalypha indica (Kuppaimeni) belongs to the family **Euphorbiaceae**. The paste obtained from the leaves of this plant is used to cure the burns on the skin.

83. What is the common name of Aegle marmelos?

- a) Kuppaimeni
- b) **Vilvam**
- c) Thoodhuvalai
- d) Sothu Katrazhai

Explanation

Aegle marmelos (Vilvam) belongs to the family **Rutaceae**. The unripe fruit of this tree is used to treat indigestion. It is used to cure chronic, diarrhoea and dysentery.

84. Phyllanthus amarus common name_____

- a) **Keezhanelli**
- b) Thoodhuvalai
- c) Sothu Katrazhai
- d) Vilvam

Explanation

Phyllanthus amarus (Keezhanelli) belongs to the family **Euphorbiaceae**. The entire plant is used for the treatment of jaundice. It gives additional strength to human liver and used to treat other liver disorders.

85. Which of the following can cure peptic ulcer?

- a) Aegle marmelos
- b) Phyllanthus amarus
- c) Solanum trilobatum
- d) **Aloe vera**

Explanation

Aloe vera belongs to the family Liliaceae. Leaves of this plant is used to cure piles and inflammations on the skin. It **cures peptic ulcer**.