

BIOLOGY

BOOKS - TARGET PUBLICATION

CLASSIFICATION OF PLANTS

Exercise

1. What is five kingdom system of classification?

- A. Eichler
- B. Robert Whittaker
- C. Gregor Mendel
- D. Frederick Miescher

Answer: B



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2. Choose the correct alternative

Thread like spiral chloroplast is found in

- A. Riccia
- B. Spirogyra
- C. Chara
- D. Ulva

Answer: B



bryophytes?

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3. Choose the correct alternative

Which of the following is NOT true for

- A. Amphibians of plant kingdom
- B. Thalloid plant body
- C. Heterotrophic mode of nutrition
- D. Multicellular

Answer: C



- 4. Lycopodium belongs to......
 - A. Bryophyta

- B. Thallophyta
- C. Pteridophyta
- D. Gymnosperms

Answer: C



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5. Choose the correct alternative

Which of the following is characteristic of pteridophytes?

- A. Asexual reproduction by spore
 - formation
- B. Non flowering plants
- C. Well developed conducting system
- D. All of these

Answer: D



6. Choose the correct alternative

Identify INCORRECT statement with respect to

Thuja and Pinus.

- A. They belong to phanerogams.
- B. They reproduce by sexual reproduction.
- C. They possess fruits.
- D. They have seeds which contain embryo

Answer: C



7. Choose the correct alternative

Tetramerous or pentamerous flowers are found in

- A. Bryophytes
- B. Monocotyledons
- C. Pteridophytes
- D. Dicotyledons

Answer: D



8. Complete the paragraph Fill in the blanks by selecting the correct word from the bracket and complete the given paragraph. (Funaria, Pteridophytes, heterotrophic, multicellular, spore, rod, autotrophic, Marsilea unicellular, Bryophytes, seed, ribbon), are also known as amphibians of plant kingdom. These plants are thalloid, and and _____. They reproduce by_____ formation. The plant body of these plants is flat_____ like long, without true roots, stem

and leaves. Example of this group of plants



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9. True or False.

Multicellular eukaryotic organisms without cell wall belong to kingdom Animalia.



Algae are autotrophic.



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11. State whether the following statements are true or false. Correct the false statements:

Bryophyta have specific tissues for conduction



of food and water

Marchantia, Riccia and Anthoceros belong to division Pteridophyta.



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13. True or False.

Nephrolepis belongs to division Thallophyta.



Pteridophytes reproduce sexually by flower formation.



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15. True or False.

Thallophytes, Bryophytes and Pteridophytes have hidden reproductive organs.



Plants belonging to division thallophyta. bryophyta and pteridophyta are called phanerogams.



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17. True or False.

Angiosperms are classified as monocots and dicots depending upon the number of cotyledons in seeds.



In Cycas, seeds are covered within fruit.



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19. True or False.

Dicotyledonous plants have parallel venation.



20. State whether the following statements are true or false. Correct the false statements:

Moncotyledonous plants have trimerous flowers.



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21. Odd one out

Spirogyra, Ulva, Sargassum, Riccia



22. Odd one out

Funaria, Marsilea, Marchantia, Anthoceros



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23. Odd one out

Pinus, Pteris, Selaginella, Lycopodium



24. Odd one out

Onion, Cycas, Picea, Thuja



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25. Odd one out

Hibiscus, Jowar, Banana, Thuja



Spirogyra: Autotrophic :: Yeast:_____



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27. Complete the analogy

Angiosperms: Seeds enclosed:: ____: Seeds

naked



Sargassum: Thallophyta:: Adiantum:_____



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29. Complete the analogy

Pteridophytes: Cryptogams

Angiosperms:



Mustard: Tap root:: Maize:_____



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31. Complete the analogy

Pea: Two cotyledons :: Rice:_____



Rose: ____:: Bamboo: Parallel venation



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33. Complete the analogy

Pinus: Roots:. Marchantia:_____



34. Match the following

Match the proper terms from column A and C with description in Column B.

A	В	C	
Thallophyta	Seeds are formed in fruits	Fern	
Bryophyta	No natural covering on seeds	Cycas	
Pteridophyta	These plants mainly grow in water	Tamarind	

Gymnosperms	These plants need water for reproduction	Moss
Angiosperms	Tissues are present for conduction of Alga water and food	



35. Match the following

3351	Group 'A'	eri Etily	Group 'B'
i.	Gymnosperms	a.	Mustard
ii.	Bryophyta	b.	Funaria
iii.	Angiospems	c.	Yeast
iv.	Pteridophyta	d.	Equisetum
		e.	Deodar



36. Who proposed five kingdom system of classification.



37. Which criteria are used for the classification of plants? Explain with reason.



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38. Answer the following

Which type of fungi are included in division thallophyta.



39. Answer the following questions:

Sketch, label and describe Spirogyra.



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40. Answer the following questions:

Write the characteristics of the plants belonging to the division Bryophyta.



41. Sketch and label the figures of the following plants and explain them into brief.

Spirogyra



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42. Answer the following questions:

Sketch and label the figures of the following and explain them in brief.

Funaria



43. Answer the following questions:

Sketch and label the figures of the following and explain them in brief.

Fern



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44. Sketch and label the figures of the following plants and explain them into brief. Spirogyra



45. Answer the following questions:

Write the characteristics of subkingdom phanerogams.



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46. Answer the following

Give any four examples of division:

Thallophyta



47. Answer the following

Give any four examples of division:

Bryophyta



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48. Answer the following

Give any four examples of division:

Pteridophyta



49. Answer the following

Give any four examples of division:

Gymnosperms



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50. Answer the following

Give any four examples of division:

Angiosperms



51. Answer the following

Fibrous roots are present in which plants?



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52. Answer the following

How seeds of gymnosperms differ from that of angiosperms?



53. Answer the following questions:

Write the paragraph in your own words about the ornamental plants called ferns.



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54. Given scientifc reasons:

Green plants are called autotrophs.



55. Complete the sentences and explain them:

(Angiosperms, gymnosperms, spores,

bryophyta, thallophyta, zygote)

......Plants have soft and fiber like body.



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56. Complete the sentences and explain them:

(Angiosperms, gymnosperms, spores,

bryophyta, thallophyta, zygote)

.....is called the 'amphibian' of the plant kingdom.



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57. Complete the sentences and explain them:

(Angiosperms, gymnosperms, spores,

bryophyta, thallophyta, zygote)

In pteridophytes, asexual reproduction occurs byformation and sextual reproduction

occurs byformation.



58. Complete the sentences and explain them:

(Angiosperms, gymnosperms, spores,

bryophyta, thallophyta, zygote)

Male and female flowers ofare borne on different sporophylls of the same plant.



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59. Distinguish between the following:

Thallphyta and Bryophyta.



60. Distinguish between:

Dicots and Monocots

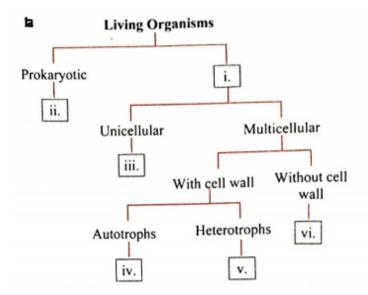


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61. Distinguish between cryptogams and phanerogams.

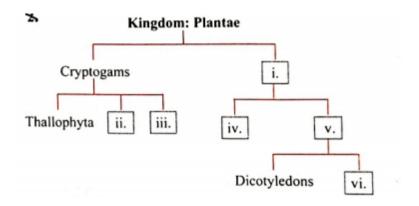


62. Complete the given table.





63. Complete the given table.





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64. Question based on paragraph

While playing in a garden, Rahul noticed some ornamental plants. When he observed them carefully, he found some Powdery spots on the

posterior surface of leaflets of plant. He was curious to observe the flowers or fruits of these plants, but he could not find any of these.

If Rahul considers 'the presence or absence of Organs' as a criteria to classify this plant, which are the possible divisions?



While playing in a garden, Rahul noticed some

65. Question based on paragraph

omamental plants. When he observed them carefully, he found some Powdery spots on the posterior surface of leaflets of plant. He was curious to observe the flowers or fruits of these plants, but he could not find any of these.

Since, Rahul could not find any fruits or flowers, in which division he should place this plant?



66. Question based on paragraph

While playing in a garden, Rahul noticed some ornamental plants. When he observed them carefully, he found some Powdery spots on the posterior surface of leaflets of plant. He was curious to observe the flowers or fruits of these plants, but he could not find any of these.

Can you guess the plant observed by Rahul in the garden?



67. Question based on paragraph

While playing in a garden, Rahul noticed some ornamental plants. When he observed them carefully, he found some Powdery spots on the posterior surface of leaflets of plant. He was curious to observe the flowers or fruits of these plants, but he could not find any of these.

What is the use of powdery spots Present on posterior surface of leaflets?



68. Question based on paragraph

While playing in a garden, Rahul noticed some ornamental plants. When he observed them carefully, he found some Powdery spots on the posterior surface of leaflets of plant. He was curious to observe the flowers or fruits of these plants, but he could not find any of these.

Give two more examples of plants belonging to same division.



69. How living organisms have been classified?



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70. Which are the special cell organelles that differentiate plant cells from animal cells?



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71. Search for a pond with greenish water.

Collect some of the green fibres from the

water. Put the fibres in a petridish and wash them clean with water. Put one of the fibres in a drop of water on a glass slide and spread it out straight. Put a cover-slip over the slide and observe under a compound microscope.



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72. You may have seen a lush green soft carpet on old walls, bricks and rocks in the rainy season. Scrape it gently with a small ruler,

observe it under a magnifying lens and discuss.



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73. You may have seen ferns among the ornamental plants in a garden. Take a leaf of a fully grown fern and observe it carefully.



74. Answer the following questions:

What is the similarity between the plants of the groups, Thallophyta, Bryophyta and Pteridophyta irrespective of differences in their body structure. (Use your brain power)



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75. Observe garden plants like Cycas, christmas tree, hibiscus, Lilly, etc. and compare them.

them. Which differences did you notice between gymnosperms and angiosperms?



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76. Soak the seeds of corns, beans, groundnut, tamarind, mango, wheat etc. in water for 8 to 10 hrs. After they are soaked, check each seed to see whether it divides into two equal halves or not and categorize them accordinly.



Which among the following CANNOT be observed in Spirogyra?

- A. Pyrenoid
- **B.** Nucleus
- C. Sori
- D. Cell wall

Answer:



Well developed roots, stem and leaves are a feature of

- A. Funaria
- B. Pteris
- C. Anthoceros
- D. Riccia

Answer:



Which of the following is FALSE about Nephrolepis?

A. It possesses rhizome.

B. It reproduces only by sexual teproduction.

C. It has pinnately compound leaves.

D. It is used as an ornamental plant.

Answer:



____are also known as amphibians of plant

kingdom.

A. Pteridophytes

B. Bryophytes

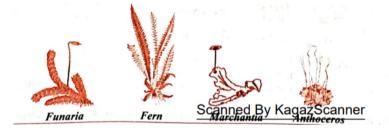
C. Phanerogams

D. Thallophytes

Answer:

81. Answer the following

Find the odd one out from the given figures.





82. Answer the following

Match the following

a.	Group 'A'		Group 'B'
b.	Lycopodium Ulothrix	1.	Bryophyta
	CHOINTEX	2.	Pteridophyta
-			Thallophyta
Jame the fall		4.	Gymnosperms



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83. Answer the following

A group of non- flowering plants With well developed conducting system.



84. Answer the following

Complete the given analogy

Sargassum: Thallophyta Riccia: _____



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85. Give the scientific reasons

Chara is an autotrophic plant



86. State whether the following statements are true or false. Correct the false statements:

Moss (Funaria) belongs to division bryophyta



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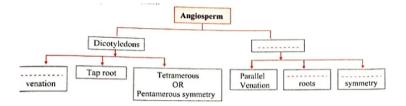
87. Answer the following

What are the cryptogams? Give two examples of it.



88. Answer the following

Complete the given flow chart.

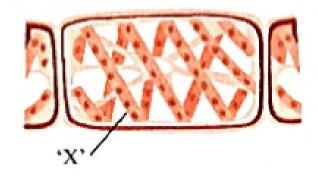




89. Answer the following

Observe the diagram and answer the given

questions.

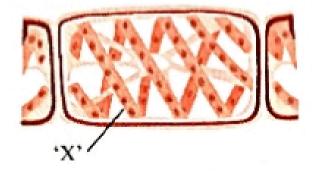




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90. Answer the following

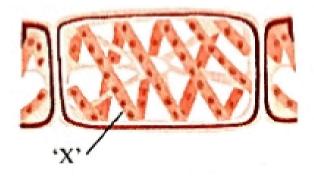
Identify the given figure.





91. Answer the following

To which division does it belong?





92. Answer the following

Both asexual and sexual reproduction occurs in pteridophytes'. Explain



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93. Answer the following

Draw neat and labelled diagram of Marchantia and mention any two characteristics.



94. Which criteria are used for the classification of plants? Explain with reason.



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95. Answer the following

Bamboo. Coconut,

Classify given examples of phanerogams into dicotyledans and monocotyledons.

Write the characteristics of each class.

Examples: Banana, Rice, Mustard, Coriander, Maize, Groundnut, wheat, Coconut, Tamarind,

