Success Key Worksheet

Std: Class 9 (Eng.& Semi) | **Time: 1 Hr.**

Ch.6 Classification of Plants

(Worksheet 1)

Date: | **Subject: Science -2** | **Max Marks: 20**

Q.1) answer the following:

1) Find the odd one out: **1**

Picea,Pinus, Cycas, Anthoceros

2) Write the correlated terms: **1**

Naked Seeds: Gymnosperms :: covered seed : _____

3) Match the following: **1**

Group A	Group B
1. Chara	a) Gymnosperm
2. Pinus	b) Pteridophyta
3. Marsilea	c) Coelenterate
	d) Thallophyta

4) State 'True' or 'False', if 'False' correct it: **1**

Phanerogams are flowering plants.

5) Answer the following in one sentences: **1**

What was Eichler's classification of kingdom plantae?

Q.2) Choose the correct alternative and rewrite the following: **3**

1) In 1883… classified plants into two sub- kingdoms.
(a) Robert Whittaker (b) Robert Hooke (c) Eichler (d) Louis Pasteur

2) …….. are flowering plants.
(a) Angiosperms (b) Bryophytes (c) Thallophytes (d) Pteridophytes

3) Angiosperms bear _____ as reproductive organ.
(a) stem (b) flower (c) leaf (d) root

Q.3) Answer the following: **6**

1) Give scientific reason of the following:

Cycas is a member of the division Gymnosperm.

2) Distinguish between monocots and dicots.

3) What is the similarity between the plants of the groups Thallophyta, Bryophyta and Pteridophyta irrespective of differences in their body structure?

Q.4) Answer the following questions: **6**

1) How have living organisms been classified?

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

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Ch.6 Classification of Plants

(Worksheet 1) Answer key

Date: **Subject: Science -2** **Max Marks: 20**

Q. 1 Answer the following::

1) Find the odd one out: **1**

Ans. Anthoceros (It is an example of Bryophyta whereas rest all are examples of Gymnosperms.)

2) Write the correlated terms: **1**

Ans. Angiosperms

3) Match the following: **1**

Ans.

1.-(d)
2.-(a)
3.-(b)

4) State 'True' or 'False', if 'False' correct it: **1**

Ans. True

5) Answer the following in one sentences: **1**

Ans. In 1883, Eichler classified kingdom plantae into two sub- kingdoms namely cryptogams and phanerogams.

Q.2) Choose the correct alternative and rewrite the following: **3**

1)Ans. (c) Eichler

2)Ans. (a) Angiosperms

3)Ans. (b) flower

Q.3) Answer the following:: **2**

1) Give scientific reason of the following:

Ans. 1. Cycas is evergreen, perennial and woody.
2. Its stems are without branches.
3. Cycas bears male and female flowers on different sporophylls of the same plant.
4. Cycas plants do not form fruits.
5. The above mention characters are the characteristics of Gymnosperms. Hence, Cycas is a member of the division Gymnosperm.

4

2)Ans. Monocots:
1. Seed has one cotyledon.
2. They tend to have fibrous roots.
3. Monocot leaves have parallel venation.
4. Monocot Flowers usually are with three parts or in multiples of three (trimerous).
5. Stems are hollow, false and disc-like.
6. Example: Bamboo, Banana etc.

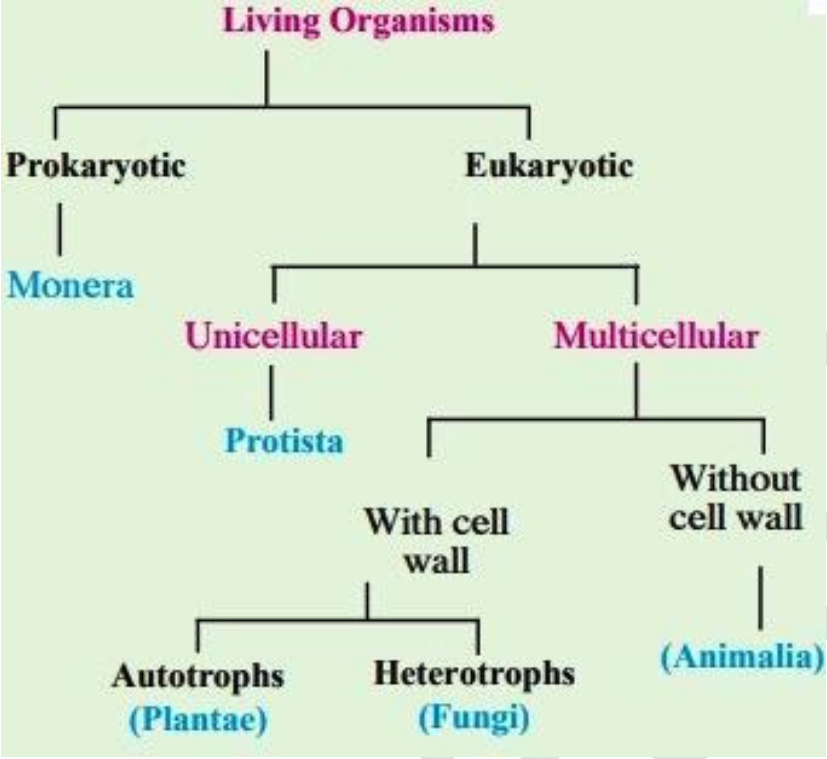
Dicots:
1. Dicot seeds have two cotyledons.
2. Dicot roots are well developed and tend to have tap roots..
3. Dicot leaves have reticulate venation.
4. Flowers are with four or five parts or in their multiples (tetramerous or pentamerous).
5. Stems are strong and hard.

6. Example: Banyan tree etc.

3)Ans. 1. All three divisions -Thallophyta, Bryophyta and Pteridophyta belong to the sub-kingdom cryptogams.
2. These all are non - flowering plants.

Q.4) Answer the following questions: **6**

1)Ans. Living organisms have been classified on the basis of their characteristics.



2)Ans. (i) Plants belonging to the division bryophyta are called 'amphibians' of the plant kingdom because they grow in moist soil but need water for reproduction.
(ii) These plants are thalloid, multicellular and autotrophic.
(iii) They reproduce by spore formation.
(iv) The structure of the plant body of bryophytes is flat, ribbon-like long, without true roots, stem and leaves. Instead, they have stem-like or leaf-like parts and root-like rhizoids.
(v) They do not have specific tissues for conduction of food and water.
(vi) Examples are Moss (Funaria), Marchantia, Anthoceros, Riccia, etc.

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6.Classification of Plants

(Worksheet 2)

Date: | **Subject: Science -2** | **Max Marks: 15**

Q.1) Answer the following: **1**

1) Find the odd one out:

Moss, Ulothrix, Ulva, Spirogyra

2) Write the correlated terms: **1**

Non flowering plants : Cryptogamae :: Flowering plants : _____

3) Match the following: **1**

Column 'A'	Column 'B'
1) Onion	a) Dicotyledon
2) Mango	b) Monocotyledon
	c) Gymnosperm
	d) Monocotyledon

4) State 'True' or 'False', if 'False' correct it: **1**

Spirally arranged green, thread like chloroplasts are found in Pteridophyta.

5) Answer the following in one sentences: **1**

How are angiosperms classified?

Q.2) Choose the correct alternative and rewrite the following: **3**

1) ……. is a Bryophyte.

(a) Ulva (b) Nephrolepis (c) Riccia (d) Equisetum

2) To which group would you assign a plant which produces spores and embryos, but lacks seed and vasculature?

(a) Algae (b) Fungi (c) Pteridophyte (d) Bryophyte

3) In which of the following group would you place a plant which produces spores, has vascular tissue and lacks seed?

(a) Algae (b) Pteridophyte (c) Bryophyte (d) Gymnosperm

Q.3) Answer the following: (Any 2) **4**

1) "Bryophyta is called the 'amphibian' of the plant kingdom." Explain.
2) "In Pteridophytes, asexual reproduction occurs by spore formation and sexual reproduction occurs by zygote formation." Explain.
3) "Thallophyta plants have soft and fiber-like body." Explain.

Q.4) Answer the following questions: (Any 1) **3**

1) Match the proper terms from columns A and C with the description in column B*

A	B	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 water and food	Algae

2) Sketch and label the figures of the plant and explain them into brief: Funaria*

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6. Classification of Plants

(Worksheet 2) Answer Key

Date: **Subject: Science -2** **Max Marks: 15**

Q.1) Answer the following:

1) Find the odd one out: **1**

Ans. Moss (It is an example of Bryophyta whereas rest all are examples of Thallophytes.)

2) Write the correlated terms: **1**

Ans. Phanerogamae

3) Match the following: **1**

Ans. (1) – (d), (2) – (a)

4) State 'True' or 'False', if 'False' correct it: **1**

Ans. False. Spirally arranged green, thread like chloroplasts are found in Spirogyra.

5) Answer the following in one sentences: **1**

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

Q.2) Choose the correct alternative and rewrite the following: **3**

1)Ans. (c) Riccia

2)Ans. (d) Bryophyte

3)Ans. (b) Pteridophyte

Q.3) Answer the following: (Any 2) **4**

1)Ans. 1. Bryophytes grow in moist soil but need water for reproduction.
2. Amphibians are those who can live both on land and water. Hence, Bryophytes are the amphibians of plant kingdom.

2)Ans. (i) Plants belonging to Pteridophyta do not bear flowers and fruits.
(ii) They have sporangia in sori present on posterior surface of their leaflets that produces spores.
(iii) Hence, they reproduce asexually by spore formation and sexually by zygote formation.

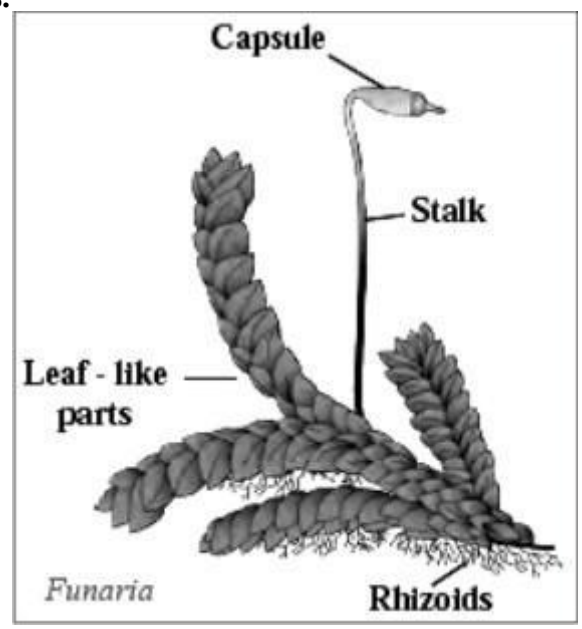
3)Ans. (i) Thallophyta does not have specific parts like root, stem, leaves, and flowers.
(ii) Since they grow in water, these plants have soft and fibre-like body.

Q.4) Answer the following questions: (Any 1) **3**

1)Ans.

A'	B'	C'
Thallophyta	These plants mainly grow in water.	Algae
Bryophyta	These plants need water for reproduction.	Moss
Pteridophyta	Tissues are present for conduction of water and food	Fern
Gymnosperms	No natural covering on seeds.	Cycas
Angiosperms	Seeds are formed in fruits.	Tamarind

2)Ans.



a. It is most commonly found bryophyta on old damp walls, trunks of trees and damp ground during rainy season.
b. A Funaria plant is small and consists of minute green leaf-like structures crowded at the apex.
c. On lower side, plant bears a number of slender multicellular threads like rhizoids which perform the functions of roots.
d. The Funaria plant reproduces sexually by the fusion of gametes. This results in development of plant body (Sporophyte).
e. Sporophyte shows presence of stalk bearing a capsule which contains spores. The capsule at maturity liberates spores for asexual reproduction.