* **Choose The Right Answer From The Given Options.** [20]

1. The plants having green and tender stems are called
   (A) herbs (B) shrubs (C) trees (D) all of these

   Ans.: (A) herbs

2. Grape is an example of
   (A) trees (B) climbers (C) creepers (D) shrubs

   Ans. : (B) climbers

3. Tomato plants are _____.
   (A) herbs (B) shrubs (C) trees (D) none of these

   Ans.: (A) herbs

4. Mango plants are _____
   (A) herbs (B) shrubs (C) trees (D) none of these

   Ans. : (C) trees

5. Lemon plants are _____
   (A) herbs (B) shrubs (C) trees (D) none of these

   Ans. : (B) shrubs

6. Which of the following have streamlined body?
   (A) Goat (B) Tiger (C) Camel (D) Fish

   Ans. : (D) Fish

7. _____ has thick and fleshy stem.
   (A) Deodar (B) Rhododendron (C) Cactus (D) All of these

   Ans. : (C) Cactus

8. Camels store food in their _____
   (A) humps (B) legs (C) tails (D) all of these

   Ans.: (A) humps

9. Example of térestrial habitat are
   (A) deserts (B) grasslands (C) mountains (D) all of these

   Ans. : (D) all of these

10. Aquatic animals live
    (A) on trees (B) on land
    (C) in water (D) on land and in water

Ans. : (C) in water

11. Which part of the plant grows in the soil?

(A) stem (B) leaf (C) root (D) seed

Ans. : (C) root

12. Which of the following plant is NOT a herb ?

(A) Sunflower (B) Rose (C) Mustard (D) Radish

Ans. : (B) Rose

13. An animal lives on land and in water. It has a tail and the body is covered with scales. This animal is :

(A) shark (B) frog (C) crocodile (D) fish

Ans. : (C) crocodile

14. One of the following plants does not have fibrous roots. The plant is

(A) sugar cane (B) bat (C) bamboo (D) paddy

Ans. : (B) bat

15. Which of the following plants does not have a tap root ?

(A) mango (B) maize (C) marigold (D) turnip

Ans.: (A) mango

16. Which one of these animals can live on land as well as in water ?

(A) Deer (B) Frog (C) Giraffe (D) Fox

Ans. : (B) Frog

17. Which of the following is a terrestrial habitat?

(A) pond (B) air (C) river (D) tropical forest.

Ans. : (D) tropical forest.

18. Fishes have scales on their bodies to

(A) keep them water (B) attract other fishes

(C) help them to swim (D) protect themselves

Ans. : (D) protect themselves

19. Animals that live in the mountains have

(A) long legs and sharphooves (B) thick fur coats

(C) long ears (D) white fur.

Ans. : (B) thick fur coats

20. Vein are present in

(A) stem (B) roots (C) leaves (D) seeds

Ans. : (C) leaves

* a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct option. [10]

21. Assertion (A): The small plants with soft, tender, green, shorter stem are called herbs.
Reason (R): A herb may or may not have branches.
(A) Both A and R are true and R is the correct explanation of A.
(B) Both A and R are true but R is not the correct explanation of A.
(C) A is true but R is false.
(D) A is false but R is true.

Ans. : (B) Both A and R are true but R is not the correct explanation of A.

22. Assertion (A): Trees are very tall plants that have stout trunks.
Reason (R): The trunk is very soft and nonwoody.
(A) Both A and R are true and R is the correct explanation of A.
(B) Both A and R are true but R is not the correct explanation of A.
(C) A is true but R is false.
(D) A is false but R is true.

Ans. : (C) A is true but R is false.

23. Assertion (A): Climbers are plants that take support of neighbouring structures.
Reason (R): Climbers have weak stems.
(A) Both A and R are true and R is the correct explanation of A.
(B) Both A and R are true but R is not the correct explanation of A.
(C) A is true but R is false.
(D) A is false but R is true.

Ans.: (A) Both A and R are true and R is the correct explanation of A.

24. Assertion (A): Creepers are plants that have weak stems which cannot stand upright.
Reason (R): Pumpkin and watermelon are examples of creepers.
(A) Both A and R are true and R is the correct explanation of A.
(B) Both A and R are true but R is not the correct explanation of A.
(C) A is true but R is false.
(D) A is false but R is true.

Ans. : (B) Both A and R are true but R is not the correct explanation of A.

25. Assertion (A): The place where organisms live is called their habitat.
Reason (R): Organisms depend for their food, water, air, shelter on their habitat.
(A) Both A and R are true and R is the correct explanation of A.

(B) Both A and R are true but R is not the correct explanation of A.

(C) A is true but R is false.

(D) A is false but R is true.

Ans. : (B) Both A and R are true but R is not the correct explanation of A.

26. Assertion (A) : Monocot plant have only one cotyledon in the seed.
Reason : Monocot plant leaf shows parallel venation.

(A) Both (A) and (R) are true and (R) is the correct explanation of (A).

(B) Both (A) and (R) are true but (R) is not the correct explanation of (A).

(C) (A) is true but (R) is false.

(D) (A) is false but (R) is true.

Ans. : (B) Both (A) and (R) are true but (R) is not the correct explanation of (A).

27. **Assertion (A) :** A camel has large and flat feet.
Reason (R) : Large and flat feet help camel to walk easily on soft sand.

(A) Both (A) and (R) are true and (R) is the correct explanation of (A).

(B) Both (A) and (R) are true but (R) is not the correct explanation of (A).

(C) (A) is true but (R) is false.

(D) (A) is false but (R) is true.

Ans.: (A) Both (A) and (R) are true and (R) is the correct explanation of (A).

28. Assertion (A) : The sunflower has recitulate venation in its leaves.
Reason: Sunflower leaves will have a tap root.

(A) Both (A) and (R) are true and (R) is the correct explanation of (A).

(B) Both (A) and (R) are true but (R) is not the correct explanation of (A).

(C) (A) is true but (R) is false.

(D) (A) is false but (R) is true.

Ans. : (C) (A) is true but (R) is false.

29. Assertion (A) : Wheat plant leaves have fibrous roots.
Reason : The wheat plant has parallel venation in the leaves.

(A) Both (A) and (R) are true and (R) is the correct explanation of (A).

(B) Both (A) and (R) are true but (R) is not the correct explanation of (A).

(C) (A) is true but (R) is false.

(D) (A) is false but (R) is true.

Ans. : (D) (A) is false but (R) is true.

30. Assertion (A) : The cactus plants have long roots.
Reason : Long roots of cactus absorb-water from a larger area.

(A) Both (A) and (R) are true and (R) is the correct explanation of (A).

(B) Both (A) and (R) are true but (R) is not the correct explanation of (A).

(C) (A) is true but (R) is false.

(D) (A) is false but (R) is true.

Ans.: (A) Both (A) and (R) are true and (R) is the correct explanation of (A).

*** Fill In The Blanks With Correct Alternative.** [15]

31. Leaves of mustard plant have _____ venation.

Ans. : reticulate

32. Maize is a _____ plant.

Ans. : monocot

33. Camels in the cold desert have _____ humps each.

Ans. : two

34. _____ is an amphibian animal.

Ans. : Frog

35. Pigeon flies with the help of their _____.

Ans. : wings

36. Plants having leaves with reticulate venation have _____ roots.

Ans. : Tap

37. Rose plant is a _____ where tomato plant is a herb.

Ans. : shrub

38. The part of a plant which rises vertically up from the ground is called its _____.

Ans. : stem

39. Habitats located on the land are called _____ habitats.

Ans. : terrestial

40. Some desert plants have _____ root system.

Ans. : tap

41. The organisms that use both water and land as their habitat are called _____.

Ans. : Amphibians

42. Cacti plants are called _____ plants.

Ans. : Terrestrial

43. _____ are small plants having a soft and delicate stem.

Ans. : Herbs

44. Fish, whales etc. are _____ organisms.

Ans. : aquatic

45. Man, tugerm trees etc, are _____ organisms.

Ans. : terrestrial

*** State Whether The Sentences Are True Or False.[1 Marks Each]** **[18]**

46. A large variety of plants and animals present in our surroundings is a part of biodiversity.

Ans. : True

47. Grouping is the method of arranging things into groups based on their common features.

Ans. : True

48. Plants can be grouped into herbs, shrubs, and trees on the basis of their leaf venation.

Ans. : False

49. On the basis of height, plants can be grouped as dicotyledons and monocotyledons.

Ans. : False

50. Monocots generally exhibit parallel venation in their leaves and possess fibrous roots.

Ans. : True

51. All animals show same type of movement.

Ans. : False

52. The place where plants and animals live is called their adaptation.

Ans. : False

53. Terrestrial animals live on land.

Ans. : True

54. Leaves hold the plant upright.

Ans. : False

55. The plants having leaves with recitulate venation have tap roots.

Ans. : True

56. A camel has large and flat feet which help it to walk easity on soft sand.

Ans. : True

57. The plants having green and tender stems are called trees.

Ans. : False

58. Fish is an amphibian.

Ans. : False

59. Hydrilla is a submerged aquatic plant.

Ans. : True

60. Bongainville, lemon, henna, rose plants are shrubs.

Ans. : True

61. Neem, Mango, Coconut are trees.

Ans. : True

62. Plants of wheat, maize, grass, millot etc. have tap roots.

Ans. : False

63. Radish has fibrous roots.

Ans. : False

*** Answer The Following Questions In One Sentence.[1 Marks Each]** **[26]**

64. Name the organs of locomotion of: Man

Ans. : Man – Legs

65. Name the organs of locomotion of:Bird

Ans. : Bird – Wings

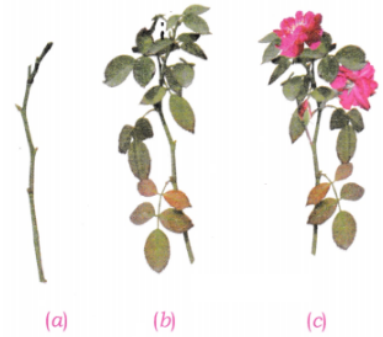
66. Name the organs of locomotion of:Fish.

Ans. : Fish – Fins.

67. From the members of the various groups given below, find the odd one out.
(a) Coriander (dhania), mint (pudina), jamun, grass.
(b) Rose, mehndi, guava, morepankh.

Ans. : (a) Jamun (Jamun is a tree while others are herbs).
(b) Guava (Guava is a tree while others are shrubs).

68. You are shown three branches of a rose in Fig. (a), (b) and (c) (below). Which one will help you best to recognize the plant?



Rose: (a) A leafless branch,
(b) A branch with leaves, and
(c) A branch with leaves and flowers
(d) A branch with leaves and flowers.

Ans. : (c) A branch with leaves and flowers.

69. Why do animals move from one place to other?

Ans. : Animals move from one place to other:
(i) To obtain their food and shelter.
(ii) To protect themselves from enemies and unfavourable climate.

70. What is adaptation?

Ans. : The change in specific features or certain habits, which enables a plant or an animal to live in its surroundings is called adaptation.

71. What is habitat?

Ans. : The surrounding where organisms survive, flourish and reproduce is called a habitat.

72. What are aquatic habitats?

Ans. : Habitats of plants and animals that live in water are called aquatic habitat.

73. What are terrestrial habitats? Give examples.

Ans. : The plants and animals that live on land are said to live in terrestrial habitats. For example, forests, grasslands, deserts, coastal and mountain region.

74. What are biotic components?

Ans. : The living things such as plants and animals in a habitat are its biotic components.

75. Explain abiotic components.

Ans. : Various non-living things such as rocks, soil, air and water in a habitat constitute its abiotic components.

76. Classify the following habitats into terrestrial and aquatic types.
Grassland, Pond, Ocean, Rice field

Ans. : The habitats can be classified as
Terrestrial habitats - Grassland and rice field
Aquatic habitats - Pond and ocean

77. Write the adaptation in aquatic plants due to which
(a) Submerged leaves can bend in the flowing water.
(b) Leaves can float on the surface of water.

Ans. : (a) Leaves are narrow and ribbon like.
(b) Stems/stalks of leaves are long, hollow and light.

78. Mention one adaptation present in the following animals:
(a) In camels to keep their bodies away from the heat of sand.
(b) In frogs to enable them to swim.

(c) In dolphins and whales to breathe in air when they swim near the surface of water.

Ans. : (a) Long legs
(b) Webbed feet
(c) Blow holes

79. What are the specific features present in a deer that helps it to detect the presence of predators like lion?

Ans. : The specific features present in a deer that helps it to detect the presence of predators like lion are:
(a) Long ears to hear movement of predators.
(b) Eyes on the sides of its head which allow it to look in all directions.

80. Here are two types of seeds. What differences do you find among the roots and leaf venation of their plants?

(a) Wheat

(b) Kidney beans

Ans. : Wheat is a monocot seed and has fibrous roots with parallel venation in its leaves whereas kidney beans being dicot have tap roots with reticulate venation in its leaves.

81. Raj argues with his friend Sanjay that "Gudhal (hibiscus) plant is a shrub". What questions can Sanjay ask for clarification?

Ans. : Sanjay can ask the following questions for clarification
1. Is the plant short, medium or tall?
2. Does the plant have a hard or a tender stem?
3. From where do the branches appear?

82. A plant has branches emerging from the stem just above the ground. Its stem is strong but not thick. What would be the category of this plant?

Ans. : Shrub

83. Why does stem of pumpkin spread on the ground?

Ans. : The stem of the pumpkin is weak and is not woody. So, it cannot stand erect.

84. Can you observe pattern of venation in a dried leaf pasted in Herbarium?

Ans. : Yes, dried leaves pasted in a Herbarium do not loose pattern of venation. We can recognise the venation.

85. How many cotyledons does a gram seed have?

Ans. : A gram seed has two cotyledons.

86. Why are deodar trees conical in shape?

Ans. : Deodar trees have conical shape so that they can slide off snow easily.

87. Name the place where an organism lives and gets its food.

Ans. : Habitat is a place where an animal lives and gets its food.

88. Write the names of two mountainous living things.

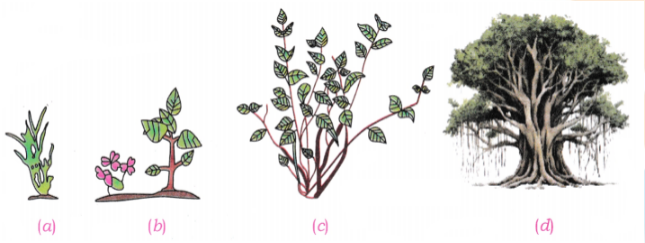
Ans. : (i) Mountain goat, (ii) Deodars

89. Give the names of two organisms which are adapted to live in desert.

Ans. : (i) Cactus, (ii) Camel

*** Answer The Following Questions In Short.[2 Marks Each]** **[22]**

90. Look carefully at the plants shown in Fig. and identify their type. Are they herbs, shrubs or trees? Are they similar in shape? Which category has the biggest plants and which has the smallest?



Ans. : Close look of these plants make it clear that these plants are not of the same type.
Plants (a) and (b) are small and have soft and thin stem. These are called herbs.
Plant (c) has many branches arising from the base and its stem is thin but hard. It is a shrub.
Plant (d) is tall. Its stem is thick and hard, it is a tree.

91. What are climbers and creepers? Give some examples.

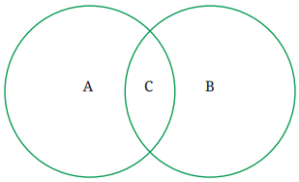
Ans. : In some plants like grape vines, money plant, bean stalk, gourd plants, etc., the stem is so weak that it cannot hold it straight. They either stand up with some support or they just spread on the ground. The ones which climb up are called climbers. For example grape vines, money plant. The ones which spread on the ground are called creepers or runners. For example gourd plants.

92. Some desert plants have very small leaves whereas some others have only spines. How does this benefit the plants?

Ans. : Some desert plants have very small leaves whereas some others have only spines. These are adaptations to dry conditions. As a result of these modifications the surface of lamina is reduced thereby reducing water loss by transpiration.

93. Names of some animals are given below. Group them based on their habitats. Write the names of aquatic animals in the area marked 'A' and terrestrial animals in the area marked 'B'. Enter the names of animals living in both habitats in part 'C'.

Horse, Dolphin, Frog, Sheep, Crocodile, Squirrel, Whale, Earthworm, Pigeon, Tortoise



Ans. : Aquatic animals (A) = Dolphin and Whale
Terrestrial animals (B) = Horse, sheep, Squirrel, Pigeon and Earthworm.
Animals living on land and sea both (C) = Frog, Tortoise and Crocodile.

94. Group the following animals into two groups based on any feature other than those discussed in the chapter- cow, cockroach, pigeon, bat, tortoise, whale, fish, grasshopper, lizard.

Ans. : The following animals can be grouped as follows
1. Animals that can fly : Pigeon and Bat.
2. Animals that cannot fly : Cow, Cockroach, Tortoise, Whale, Fish, Grasshopper and Lizard.

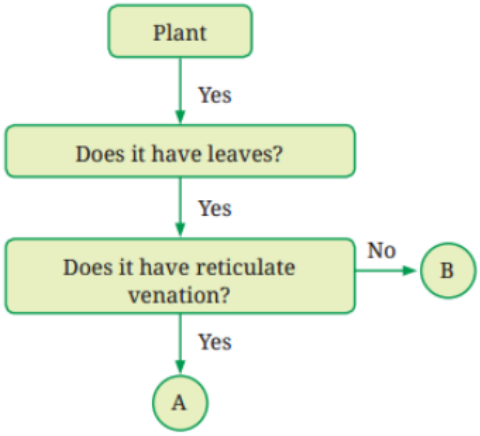
95. Based on the information in the table, find out examples of these plants for each group.
(a) What other similarity do plants of group A have ?
(b) What other simiiarity do plants of group B have ?

Ans. : Examples for group A and B.
1. Rose, mango, radish, carrot and hibiscus
2. Grass, wheat, onions, maize and rice etc.
(a) Similarity of Plants in Group A: Plants in Group A (dicots) typically have leaves with reticulate venation.
(b) Similarity of Plants in Group B: Plants in Group B (monocots) generally have leaves with parallel venation.

96. Manu's mother maintains a kitchen garden. One day. she was digging out radish from the soll. She told Manu that radish is a kind of root. Examine a radish and write what type of root it is. What type of venation would you observe in the leaves of radish plant?

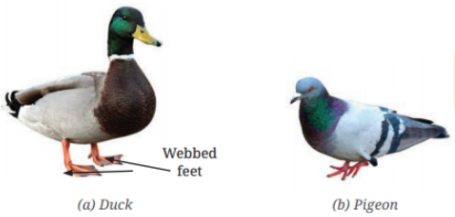
Ans. : Radish has a tap root system. The type of venation observed in the leaves of radish plant is reticulate venation.

97. Analyse the flowchart. What can be examples of 'A' and 'B'?



Ans. : A : Hibiscus leaves
B : Banana plants

98. Observe the labelled part of a duck in the picture given below. What differences do you observe in the feet of the duck compared to the other birds? Which activity would the duck be able to perform using this part?



Ans. : Ducks have webbed feet, which are different from the feet of the other birds like pigeon.

Ducks use their webbed feet like paddles to provide more surface to push against the water, which helps them to move through the water.

99. What are herbs?

Ans. : The small plants with soft/tender, green, short stem are called herbs. Herbs hardly attain height more than 1.5 metres. Their stems are not woody and can be bent. A herb may or may not have branches, e.g., tomato, mint, paddy, etc.

100. With the help of diagrams, tabulate the differences between a shrub and a tree, based on the properties of the stem.

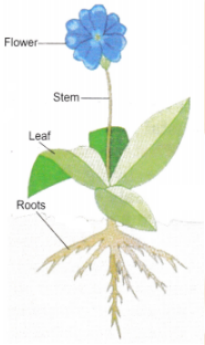
Ans. :

Shrub	Tree
1. More branches arise from the base of stem.	1. The branches arise from the stem.
2. The stem is hard and thin.	2. The stem is hard, thick and woody.
 Fig. Shrub	 Fig. Tree

*** Answer The Following Questions In Brief.** [9]

101. Read the function of parts of a plant given below:
(a) fixes plant to the soil
(b) prepares starch
(c) takes part in reproduction
(d) supports branches and bears flowers
In the diagram given in Fig. write the names of the parts whose functions you have just read at the appropriate space.

Ans. :



(a) Fixes plant to the soil – root.
(b) Prepares starch – leaf.
(c) Takes part in reproduction – flower.
(d) Supports branches and bears flowers – stem.

102. Look at the image of a mountain goat and a goat found in the plains. Point out the similarities and difference between them. What are the reasons for these differences?

(a) Mountain Goat

(b) Goat found in the plains

Ans. : The similaritie between mountain goat and goat found in the plains are as follows

Both of them are herbivores having hoove and horns.

The differences between mountain goat and goat found in plains are as follows.

Mountain goats have strong legs, long and dense fur and special hooves. The strong hooves helps to increase its grip while running up the mountain and the long fur protects them against the cold.

Goats living in plains have smoother hooves and less fur. The smoother hooves help them walk on plains.

103. Here are two types of seeds. What differences do you find among the roots and leaf venation of their plants?

(a) Wheat

(b) Kidney beans

Ans. : Differences between wheat and kidney beans:

	Features	Wheat (Monocot)	Kidney Beans (Dicots)
(i)	Root system	Fibrous root system	Taproot system
(ii)	Root characteristics	Dense network of thin roots	Central thick taproot with lateral branches
(iii)	Leaf venation	Parallel venation	Reticulate venation
(iv)	Leaf venation characteristics	Veins run parallel along the length of the leaf.	Network of branching veins with a permanent midrib.

*** Answer The Following Questions To The Point.** **[5]**

104. As the population grows and people want more comfortable lives, forests are being cut down to meet various needs. How can this affect our surroundings? How do you think we can address this challenge?

Ans. : The loss of trees and other vegetation due to cutting down of forests can cause climate change, loss of biodiversity, soil erosion, flooding, etc.

We can address this challenge by the following methods

1. Replanting of trees and, putting a ban on cutting of trees.
2. Implementing regulations and laws to address the severity of cutting down the forest.

*** Match the following.** [10]

Column A	Column B
105. Climber	(a) Protected forests
106. Shrub	(b) Grapes
107. Taproot	(c) Parallel venation
108. Fibrous root	(d) Rose
109. Sacred groves	(e) Reticulate venation

Ans. :

Column A	Column B
(i) Climber	(b) Grapes
(ii) Shrub	(d) Rose
(iii) Taproot	(e) Reticulate venation
(iv) Fibrous root	(c) Parallel venation
(v) Sacred groves	(a) Protected forests

S.No.	Name of plant	Type of leaf venation	Type of roots
110.	Mango	_____	_____
111.	Mustard	_____	_____
112.	Wheat	_____	_____
113.	Bajra	_____	_____
114.	Gram	_____	_____

Ans. :

Name of plant	Type of leaf venation	Type of roots
1. Mango	Reticulate	Taproot
2. Mustard	Reticulate	Taproot
3. Wheat	Parallel	Fibrous root
4. Bajra	Parallel	Fibrous root
5. Gram	Reticulate	Taproot

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