Chapter- 1

PLANT AND ANIMAL TISSUES

QUESTION BANK

SUB TOPIC 1
INTRODUCTION TO TISSUES, LEVELS OF ORGANISATION, TYPES OF TISSUES -MERISTEMATIC TISSUES AND PERMANENT TISSUES

1 MARK QUESTIONS

1. Name the outer covering of a) Plant cell b) Animal cell.
2. Give one term for the following
   The living substance of the cell.
3. Define tissue.
4. Name the two types of plant tissues.
5. Define meristematic tissue.
6. Give the location of meristematic tissues.
7. Mark the following statements as True /False
   a) Zygote contains one nucleus.
   b) Apical meristematic tissues are found in nodes and internodes region.
   c) Organs are made up of group of tissues.
   d) Kidney, stomach, Small intestine etc. belong to tissues.
   e) Life begins with cells.

2 MARKS QUESTIONS

8.Why does an organism—plant or animal, require different types of cells in the body?

9.Why are plants and animals made of different types of tissue?

10.Give reasons:

(a) Meristematic cells have a prominent nucleus and dense cytoplasm but they lack vacuole.

3 MARKS QUESTIONS

11.Describe the levels of organisation in living organisms with the help of a labelled flowchart.

12.Differentiate between Meristematic tissue and Permanent tissues.

5 MARKS QUESTIONS

13. a) Define tissue.

b) Draw a neat labelled diagram of plant body showing different types of meristematic tissues.

c) Give the function of all the three types of meristematic tissues.

SUB TOPIC 2

TYPES OF PERMANENT TISSUES: SIMPLE AND COMPLEX, TYPES OF PERMANENT TISSUES

1 MARK QUESTIONS

14.Define permanent tissue.

15.Which type of permanent tissue is found in coconut husk?

16.Name the type of specialised permanent tissue that contains air spaces.

17.Name the type of specialised permanent tissue that contains chlorophyll.

18.Name the two-living simple permanent tissues.

19.Name the dead simple permanent tissue.

20.Give reason for the following:

Intercellular spaces absent in sclerenchyma tissues.

2 MARKS QUESTIONS

21. Give two characteristics of permanent tissues.

22.Give two characteristics of parenchyma tissues.

23.Give two characteristics of collenchyma tissues.

24.Give two characteristics of sclerenchyma tissues.

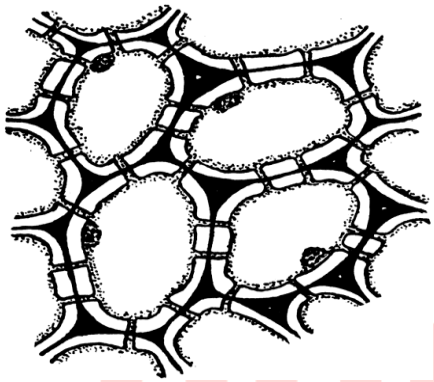
25. Give any two parts in plants which have collenchyma tissues.

26.Give any two parts in plants which have collenchyma tissues

27.Give any two parts in plants which have sclerenchyma tissues.

3 MARKS QUESTIONS

28.Identify the tissue in the following figure and give three characteristics of the tissue.



29. Differentiate between:

a) Parenchyma and Collenchyma
b) Parenchyma and Sclerenchyma

30.Draw the diagram of parenchyma tissue and label it along with its function.

31.Draw the diagram of collenchyma tissue and label it along with its function.

32.Draw the diagram of sclerenchyma tissue and label it along with its function.

33.Deevyanshi brought an aquatic plant which was floating on the surface to the science laboratory out of water. She cut a section of the leaf of the plant and saw a tissue with lot of air cavities in it. She went to her teacher and discussed about the role of the air cavities in the leaves of the aquatic plant.
(i) Which type of tissue present in plants has air cavities? Name it.
(ii) What is the role of large air cavities in the leaves of such plants?

5 MARKS QUESTIONS

34.a) Which tissue in plants provides them flexibility?

b) Draw and describe the structure and location of the above tissue.

c) Write any two characteristics of such tissues

35. i) Which type of simple permanent tissues are found in the following

a) Potato b) green leaf c) Coconut husk d) veins of leaves

e) below the epidermis of stems. f) carrot

ii) Give the two specialised function of parenchyma tissues other than storage and name such type of parenchyma tissue.

36. Draw all three types of simple permanent tissues and mention their function.

SUB TOPIC 3

COMPLEX PERMANENT TISSUES: XYLEM AND PHLOEM

1 MARK QUESTIONS

37. Name the complex tissue that help in transportation of water and tissue that help in transportation of food in plants respectively.

38. Name the common dead component of xylem and phloem.

39. Which of these contain more dead cells- xylem or phloem?

40. How can you know the age of an old woody stem?

2 MARKS QUESTIONS

41.Name the components of xylem.

42.Name the components of phloem.

3 MARKS QUESTIONS

43.Why are xylem and phloem called complex tissues? How are they different from one other functionally?

5 MARKS QUESTIONS

44.Name the components of xylem. Mention which of these are living and which are dead. List the function of each component.

45.Name the components of phloem. Mention which of these are living and which are dead. List the function of each component.

SUBTOPIC 4

PROTECTIVE TISSUE-CORK AND EPIDERMIS

1 MARK QUESTIONS

46. Name the tissue which forms the outer most covering of the root, stem or leaf surface in plants.

47. What are the two types of protective tissues?

2 MARKS QUESTIONS

48.Name the waxy layer of epidermis of leaves in a plant. Mention its function.

49. Name the chemical that gives a waxy appearance to the leaf surface of the plants. How it helps the xerophytes? [HOTS]

SUB TOPIC 5

ANIMAL TISSUES- TYPES: A) EPITHELIAL TISSUE

1 MARK QUESTIONS

50. Name the epithelial tissue found in wind pipe.

51. Which type of epithelial tissue forms our skin?

52. Give one characteristic of the squamous epithelial tissue.

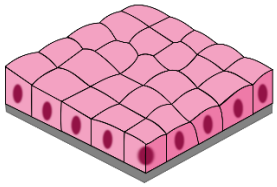
53. Which of the following is found in stomach and intestine? Columnar epithelium/cuboidal epithelium

54. Give the function of cuboidal epithelial tissue.

55. Mention the function of ciliated epithelium.

2 MARKS QUESTIONS

56. Identify the following figure and give its function.



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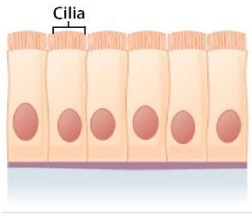

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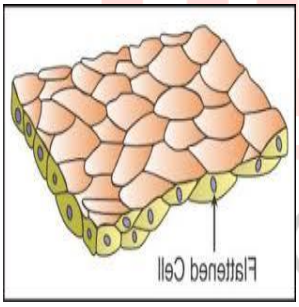

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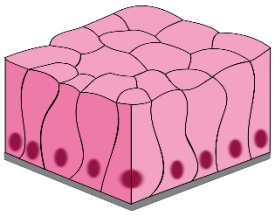


3 MARKS QUESTIONS

60. Name the types of epithelial tissue based on their shapes, mention their location and function.

61. What are epithelial tissue? Where are they located and give their functions?

5 MARKS QUESTIONS

62. Describe the different types of epithelial tissue found in animals categorised on the basis of their shapes. Give the location and function of each type.

63. Give the location and function of each type of epithelial tissue with one characteristic of each.

SUB TOPIC 6

ANIMAL TISSUES- TYPES: B) CONNECTIVE TISSUES

1 MARK QUESTIONS

64.Name the two types of fluid connective tissue.

65.Name the fibrous connective tissue that

a) binds skin to underlying tissue

b) is filled with fat globules.

66.Name the two components of blood which are absent in lymph.

67.What is the matrix of bone composed of?

68.State whether the following statement is true or false?

Adipose and areolar tissue are two types of supportive or skeletal tissue.

69. Mention one point of difference between tendon and ligament.

70. Mention one general function of connective tissue.

2 MARKS QUESTIONS

71.What is the liquid component of blood? What is its function?

72.What will be the consequence of removal of blood platelets from blood?

In which type of connective tissue are they found?

3 MARKS QUESTIONS

73.During a sports event, Sambhavi suffered a sprain due to which she was not able to run. Her teacher gave her support and told her that it was due to a ligament tear. She also called the doctor to give treatment to Sambhavi.
(i) What is a ligament? What kind of tissue is it?
(ii) Which type of fibrous tissue has great strength, limited flexibility and is similar to ligament?

74.What are cartilages? Where are they located (name any two)? Mention one function of these cartilages?

75.Name the three types of connective tissues. Give any two examples of each type.

76.What are the cellular components of blood? Mention functions of each.

77.What is lymph? Explain how is it formed.

78.Match column A with Column B

Column A	Column B
i) Areolar tissue	a) bones to muscles
ii) Adipose tissue	b) fat globules
iii) Tendons	c) binding skins to muscles
iv)Ligaments	d) tendons and ligaments
v) Fibrous tissues	e) muscles to bones
vi)Supportive tissues	f) bones and cartilages

5 MARKS QUESTIONS

79.Ayush got injured while playing football. His injured leg started bleeding and his friends immediately rushed to take him to the doctor to give him first aid. The blood flowing from the wound stopped after some time and the doctor applied antiseptic on the wound.
(i) Why did the blood stop flowing after some time from the wound?
(ii) What kind of tissue is blood? Why blood looks red in colour? What is the major function of these?

(iii) How lymph differs from blood?

80. Briefly describe different types of fibrous connective tissues with location and function.

SUB TOPIC 7

ANIMAL TISSUES- TYPES: C) MUSCULAR TISSUES

1 MARK QUESTIONS

81. Name the type of muscle used when we throw a ball.

82.Name the two types of involuntary muscles in our body.

83. Why striated muscles are called voluntary muscles? Give reasons.

84. Name any two parts in our body where we find smooth or unstriated muscles.

85.Human heart is able to continuously pump blood to different parts of body without getting fatigued. Which tissue helps heart to carry out this process?

86. State true or false:

Striated muscles are uninucleated.

87. How do muscles help in movement and locomotion?

2 MARKS QUESTIONS

88.Complete the following table:

Types of muscles	Number of nucleus	Voluntary /involuntary	Location
Skeletal /striated	More than one	C	Arms, legs
Smooth/unstriated	Single	B	D, urinary bladder
Cardiac	**A**	involuntary	heart

89.Differentiate the following activities on the basis of voluntary (V) or involuntary (IV) muscles.

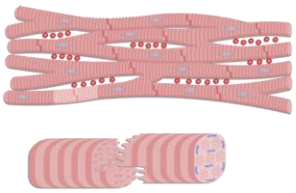
(a) Jumping of frog

(b) Pumping of the heart

(c) Writing with hand

(d) Movement of chocolate in your intestine

90. Identify the following muscular tissue and give its function.



91. Identify the following muscular tissue and give its function.

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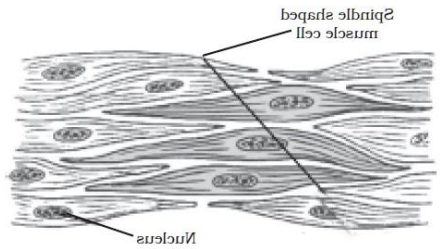


3 MARKS QUESTIONS

93.Differentiate between skeletal and smooth muscles (3 points)

94.What are the characteristics of cardiac muscles? Give their location and functions.

5 MARKS QUESTIONS

95.Diagrammatically show the difference between the three types of muscle fibres. Mention characteristics of each.

96.Draw the different types of muscular tissues and give their functions.

SUBTOPIC 8

ANIMAL TISSUES- TYPES: D) NERVOUS TISSUE

1 MARK QUESTIONS

97.Name the functional unit of nervous tissue.

98.Name the part of neuron that help in receiving the nerve impulses.

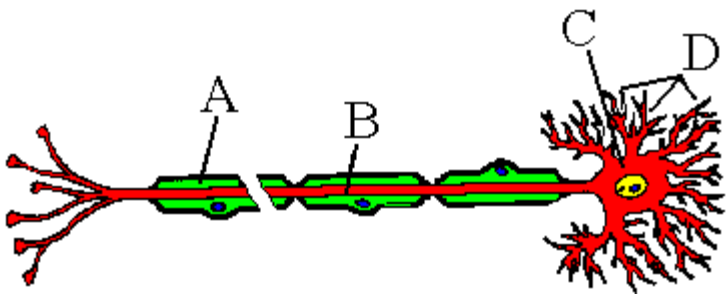
99.Which of the following has a prominent nucleus?

a) Dendrite b) Cyton c) Axon d) Synapse

2 MARKS QUESTIONS

100.Define synapse, Mention its function. [HOTS]

101.Identify A, B, C and D in the following figure.



3 MARKS QUESTIONS

102.What are the different parts of a neuron? Mention the functions of each.

103. How nervous tissue works? Elaborate.

5 MARKS QUESTIONS

104. Draw a neat labelled diagram of neuron. Give the function of i) Dendrite ii) Cell body iii) Axon