

MATHS4U

Biology

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It's all about believing
Topic:- Tissue in plants and

1. Collenchyma differs from parenchyma in having (a) cellulose walls (b) vacuoles (c) pectin deposits at corners (d) living protoplasm
2. A tissue whose living cells from the mechanical tissue of actively growing organs and whose cell walls show cellulosic unthickened thickenings often at the corners of its cells is called (a) sclerenchyma (b) collenchymas (c) chlorenchyma (d) parenchyma
3. The thickening of cell wall, lignifications and specialization for mechanical function are characteristic of (a) collenchyma (b) sclerenchyma (c) chlorenchyma (d) parenchyma
4. Bast fibres in woody stem belongs to (a) cork (b) cortex (c) xylem (d) phloem
5. A tracheid differs from a vessel in having (a) scalariform thickenings (b) discontinuous lumina, which are separated (c) lack of bordered pits (d) thick walls without contents
6. Vessel and companion cells are characteristic of xylem and phloem of (a) pteridophytes (b) gymnosperms (c) angiosperms (d) bryophytes
7. The only plant cells without nucleus among the following is (a) cambium (b) root hair (c) companion cells (d) xylem vessels
8. Trachea, tracheids, wood fibres, and parenchymatous tissues are found in (a) xylem (b) cambium (c) cortex (d) phloem
9. The manufactured food in green plants moves from the leaves to other parts through (a) pith (b) xylem (c) cortex (d) phloem
10. Sieve tubes have (a) simple oblique wall (b) perforated and longitudinal plates (c) perforated and oblique septa (d) apical and oblique plates
11. Which one of the following living tissues of plants generally lacks nucleus? (a) vessels of xylem (b) parenchyma of pith (c) cambium of roots (d) sieve tubes of phloem
12. Sieve tubes are better suited for translocation because these (a) are broader than long (b) possess bordered pits (c) possess no end walls (d) possess a broader lumen and perforated cross walls
13. Companion cells are usually seen associated with (a) fibres (b) parenchyma (c) xylem vessels (d) sieve tubes
14. Grass stem elongates by the activity of (a) secondary meristem (b) intercalary meristem (c) apical meristem (d) primary meristem
15. The xylem and phloem are present on one radius, the bundle is known as (a) conjoint (b) concentric (c) open (d) collateral
16. A collateral vascular bundle is one in which xylem and phloem strands are joined with phloem (a) towards (b) on both sides of xylem (c) all round xylem (d) toward outside
17. In which of the following phloem occurs in two patches? (a) bicollateral (b) collateral (c) amphicribal (d) amphivasal
18. In a bicollateral vascular bundle (a) Phloem is sandwiched between xylem (b) xylem is sandwiched between phloem (c) transverse splitting of one bundle into two equal parts (d) bundles which can not be identified
19. Vascular bundle in the stem of cucurbita are (a) radial (b) collateral (c) bicollateral (d) concentric
20. In root, xylem is referred as (a) polarch (b) mesarch (c) bicollateral (d) exarch
21. In which of the following, growth is subapical? (a) root (b) shoot (c) pedicle (d) petiole

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22. Polyarch condition is seen in (a) monocot (b) dicot root (c) dicot stem (d) monocot stem
23. Monocot root differs from dicot root in having (a) scattered vascular bundles (b) well developed vascular bundles (c) well developed vascular bundles (d) open vascular bundles
24. In dicot root (a) vascular bundles are arranged in ring and have cambium (b) xylem and phloem radially arranged (c) xylem is always endarch (d) vascular bundles are scattered
25. Vascular bundle in dicot roots is (a) conjoint (b) radial (c) collateral (d) bicollateral
26. Centripetal xylem is present in (a) dicot root (b) monocot stem (c) branches of stem (d) dicot stem
27. 3-radial vascular bundles are present in (a) monocot stem (b) monocot root (c) dicot root (d) dicot stem
28. Well – developed pith is found in (a) monocot stem and dicot root (b) monocot root and dicot stem (c) dicot root and dicot stem (d) monocot root and monocot stem
29. Collenchyma hypodermis is present in (a) dicot stem (b) monocot as well as in dicot stems (c) monocot stem (d) monocot root
30. The lacunae in the vascular bundles of monocot stems is (a) a mucilage canal (b) lysigenous water cavity (c) a large sized vessel (d) metaxylem
31. Phloem parenchyma is absent in (a) dicot leaf (b) monocot stem (c) dicot stem (d) dicot root
32. External protective tissues of plants are (a) cortex and epidermis (b) pericycle and cortex (c) epidermis and cork (d) pericycle and cork
33. Mesophyll tissue is well differentiated into spongy tissue and palisade tissue in (a) dicot leaves (b) xerophytic stem (c) hydrophytic stem (d) monocot leaves
34. Bulliform cells are present (a) in upper epidermis of dicot leaves (b) in lower epidermis of monocot leaves (c) in upper epidermis of monocot leaves (d) in dicot stem
35. Lateral meristem is responsible for (a) growth in parenchyma (b) growth in thickness (c) growth in cortex (d) growth in length
36. The youngest layer of secondary phloem in woody dicot stem is located (a) just outside the vascular cambium (b) just on the inner side of cambium (c) between periderm and primary cortex (d) just outside pith
37. As a tree grows older, which increases more rapidly in thickness? (a) Sapwood (b) cortex (c) Phloem (d) Heartwood
38. The wall of cork cells is mostly impregnated with (a) cutin (b) suberin (c) lignin (d) hemicellulose
39. What is the other name for cork tissue? (a) Phellogen (b) phelloderm (c) Phellem (d) periderm
40. Cork cells are (a) photosynthetic (b) elongated and participate in movement (c) meristematic (d) dead
41. Commercial cork is obtained from the species of (a) berberis (b) Quercus (c) Salix (d) Betula
42. Dendrochronology is the study of (a) height of a tree (b) age of a tree by counting the number of annual rings in the main stem (c) diameter of a tree (d) age of tree by counting the number of leaves in the main stem

MATHS4U

Biology

NTSE

animals

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43. The cross – section of a trunk of a tree showed 50 annual rings. The age of tree is (a) 50 years (b) 50 months (c) 100 years (d) 25 years
44. The best method to determine the age of tree is (a) to measure its diameter (b) to count the number of leaves (c) to count the number of annual rings in the main stem at the base (d) to measure its height
45. Trees at seashore do not have annual rings because (a) there is climatic variation (b) there is no marked climatic variation (c) there is enough moisture in the atmosphere (d) soil is sandy
46. If the sign was nailed to the side of tree 5' above the ground in 1974 how high would the sign be in 1984 if the tree grew 4" taller each years? (a) 5' high (b) 8' high (c) 4' 8" (d) 9' 4"
47. Grafting is not possible in monocots because (a) have scattered vascular bundles (b) have parallel venation (c) are herbaceous (d) lack cambium
48. Safranin stains which element of the tissue (a) starch elements (b) lignified elements (c) bast (d) protein elements
49. A tissue is a (a) a group of separate organs that are coordinated in their activities (b) group of similar cells that function together in a specialized activity (c) layer of cells surrounding an organ (d) sheet of cells, one layer thick
50. Which types of tissue form the thin surface for the gas exchange in the lungs? (a) epithelial (b) connective (c) nervous (d) muscle
51. Which type of tissue form the inner of a blood vessel? (a) epithelial (b) connective (c) muscle (d) nervous
52. The cells forming the peritoneal lining of the coelom comprise the (a) squamous epithelium (b) columnar epithelium (c) glandular epithelium (d) ciliated epithelium
53. Endothelium of the inner surface of blood vessels in vertebrates is formed (a) simple squamous epithelium (b) columnar epithelium (c) cuboidal epithelium (d) ciliated cells
54. Cells of squamous epithelium are (a) columnar (b) tall with elongated nuclei (c) flat plate – like (d) cube like
55. Epithelial tissues with thin flat cells appearing like packed tiles occur on (a) inner lining of stomach (b) inner lining of fallopian tube (c) inner lining of cheek (d) outer surface of ovary
56. The intestinal epithelium is generally composed of tall columnar cells. This arrangement is very efficient because (a) the largest numbers of cells are exposed to the lumen (b) the maximum surface area of each cell is exposed the lumen (c) the columnar cells are the most resistant to injury (d) only these cells can produce digestive enzymes
57. Which one of the following epithelial cells repairs the injured skin? Columnar (b) sensory (c) Squamous (d) Cuboidal
58. The epithelium best adapted for a body surface subject to abrasion is (a) simple squamous (b) stratified squamous (c) stratified columnar (d) simple cuboidal
59. In which of the following the plasma mem brane of the epithelial lining is modified into microvilli? (a) tubules of the tests (b) vagina (c) intestine (d) urinary tract
60. Stratified squamous epithelium occurs in (a) stomach (b) pharynx (c) trachea (d) intestine
61. The actively dividing layer of columnar cells in the epidermis of man is called as the (a) stratum granulosum (b) stratum lucidum (c) stratum Malpighi (d) stratum corneum
62. In man thickest skin is found in (a) palm (b) thigh (c) sole (d) thumb

MATHS4U

Biology

NTSE

animals

It's all about believing Topic:- Tissue in plants and

63. The protein deposited in the dead superficial cells that make the skin epithelium impervious to water is (a) keratin (b) elastin (c) collagen (d) mucus
64. Horns of most mammals are composed of (a) bones (b) elastin (c) collagen (d) chitin
65. Epithelial tissue performs the following functions (a) sensation (b) secretion (c) absorption (d) all the three
66. Which type of tissue forms glands? (a) epithelial (b) connective (c) nervous (d) muscle
67. Mammary glands are modified (a) sebaceous gland (b) sweat gland (c) oil gland (d) lymph gland
68. Sebaceous glands are found in (a) dermis of skin of mammals (b) epithelium of stomach of frog (c) epithelium of intestine of frog (d) epidermis of skin of mammals
69. Which of the following tissues matrix, which is the source of its structural and functional performances? (a) connective tissue (b) muscular tissue (c) nervous tissue (d) epithelial tissue
70. In animal connective tissue, the function of the ground substance is to (a) resist compression (b) act as a source of storage of polysaccharide (c) resist tension (d) provide a matrix support for embedded chondrin
71. Which type of tissue forms the framework of the external ear? (a) epithelial (b) connective (c) muscle (d) nervous
72. Ground substance and fibres in the connective tissue are the secretory products of (a) mast cells (b) reticular cells (c) plasma cells (d) fibroblasts
73. Which one of the following cell type in the connective tissue produces antibodies? (a) Plasma cells (b) macrophages (c) mast cells (d) reticular cells
74. Wrinkling in old age is due to (a) collagen (b) myosin (c) keratin (d) actin
75. The camel's hump is composed of a tissue that provides water when oxidized (a) skeletal (b) areolar (c) muscular (d) adipose
76. Which one of the following directly helps in keeping the body warm? (a) Sweat glands (b) Adipose tissue (c) connective tissue (d) all of the above
77. Dermis of mammalian skin is mainly composed of (a) muscular tissue epithelial tissue (c) connective tissue (d) all of the above
78. Fat is abundant in (a) liver cells (b) alveolar tissue (c) lymph glands (d) adipose tissue
79. The white fibrous tissue occurs in (a) ligaments (b) cartilage (c) tendons (d) bone
80. The fibrous tissue which connects the two bones, is (a) connective tissue (b) ligament (c) tendon (d) adipose tissue
81. Tendon is made up of (a) only collagen fibres (b) inelastic connective tissue fibres (c) elastic connective tissue fibres (d) inelastic and elastic connective tissue fibres
82. Ligaments are made up of (a) white fibres and some yellow elastic fibres (b) white fibres only (c) yellow fibres only (d) yellow fibres and muscle fibres
83. Tendon connects (a) cartilage with muscles (b) bone with muscles (c) ligament with muscles (d) bone with bone
84. The skeletal tissue present in the pinna of a mammal is in the nature of (a) elastic cartilage (b) fibrous cartilage (c) calcified cartilage (d) hyaline cartilage
85. Cartilage is produced by (a) osteoblasts (b) epithelium (c) fibroblasts (d) chondroblasts

MATHS4U

Biology

NTSE

animals

It's all about believing Topic:- Tissue in plants and

86. The major constituent of vertebrate bone is (a) calcium phosphate (b) potassium hydroxide (c) sodium chloride (d) calcium carbonate
87. Bone forming cells are (a) osteoblasts (b) osteoclasts (c) chondroblasts (d) chondroclasts
88. Besides calcium phosphate the bones contain (a) calcium chloride phosphate the bones contain (a) calcium chloride (b) magnesium carbonate (c) sodium chloride (d) magnesium phosphate
89. Bone marrow is important for (a) breakdown of WBC (b) production of RBC (c) breakdown RBC (d) production of WBC
90. A bone left in dilute HCl for about three days will (a) crack into pieces (b) become soft and elastic (c) dissolve completely (d) remain as it is
91. A man was brought up at sea level while his brother spent all his life at an altitude of 10,000 feet. The latter will have (a) more active bone marrow (b) lower blood pressure (c) less subdermal fat (d) more active sweat glands
92. Haversian system is typically found in bones of (a) fishes (b) aves (c) reptiles (d) mammals
93. A bone is distinguished from cartilage by the presence of (a) collagen (b) lymph vessels (c) blood vessels (d) haversian canals
94. The bone of a mammal contain Haversian canals , which are connected by transverse canals known as (a) semicircular canals (b) inguinal cannal (c) Volkmann's canals (d) bidder's canals
95. Which one of these is a kind of tissue? (a) lung (b) kidney (c) blood (d) pancreas
96. Blood is (a) acidic (b) alkaline (c) variable (d) neutral
97. Mammalian erythrocytes are (a) circular (b) biconcave (c) non-nucleated (d) all the above
98. In camel, erythrocytes are (a) oval and nucleated (b) circular, biconcave and nucleated (c) oval and non-nucleated (d) circular, biconcave, non-nucleated
99. Life span of RBC is (a) 50 days (b) 75 days (c) 120 days (d) 100 days
100. Iron in haemoglobin exists as (a) unionized iron atom (b) ferric irons only (c) ferrous or irons ferrous irons depending upon the oxygenate state of the heme moiety
101. Which one of the following blood pigments contains copper? (a) haemoerythrin (b) harmocyanin (c) chlorocruorin (d) harmoglobin
102. Red cell count is carried out by (a) harmocytometer (b)haemoglobinometer (c) sphygmomanometer (d) electrocardiogram
103. Which of the following tissue in a human being uses the greatest amount of energy? (a) vascular tissues (b) muscular tissue (c) nervous tissue (d) epithelial tissue
104. The basic unit of muscle contraction is (a) tropomyosin (b) myosin (c) actin (d) sarcomere
105. Striated muscles are found in (a) gall bladder (b) wall of bronchi (c) leg muscles (d) lungs
106. Striped muscle fibre has (a) many nuclei (b) two nuclei (c) no nuclei (d) one nucleus
107. In human, increased heat production is achieved most rapidly by increasing the activity of the (a) sweat gland (b) liver (c) skeletal muscle (d) brain
108. When we lift hand (a) the triceps conthe biceps relaxes (b) the biceps contracts and the triceps relaxes (c) both biceps and triceps contract (d) both biceps and triceps relax
109. Triceps and biceps are examples of (a) antagonistic muscles (b) involuntary muscles (c) sphincter muscles (d) smooth muscles

MATHS4U

Biology

NTSE

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110. The strongest muscle in the body is present in (a) arm (b) Jaw (c) thigh (d) neck
111. Sarcolemma is found over (a) heart (b) skeletal muscle fibre (c) nerve fibre (d) heart muscle
112. Smooth muscles fibres are (a) spindle shaped, unbranched, non striated multinucleate and involuntary (b) spindle – shaped , unbranched, unstriated uninucleate and involuntary (c) cylindrical striated, unbranched, multi – nucleate and voluntary (d) cylindrical , unbranched, non – striated multinucleate and involuntary
113. Which type of tissue changes the diameter of a blood vessel? (a) connective (b) nervous (c) muscle (d) epithelial
114. Smooth muscles occur in (a) vein (b) artery (c) uterus (d) all the above
115. Cardiac muscle is made of branched fibres that are (a) nonstriated and under voluntary control (b) striated and hot under voluntary control (c) nonstriated and not under voluntary control (d) striated and under voluntary control
116. Muscles, which are immune to fatigue, are (a) unstriped muscles (b) cardiac muscles (c) Jaw muscles (d) skeleton muscles
117. Muscles developed from(a) mesoderm (b) ectoderm (c) endoderm (d) all the above
118. Which of the following tissue in mammals show the least capacity for regeneration? (a) endothelium of blood vessels (b) skeletal tissue of long bones (c) nervous tissue of brain (d) epithelial tissue
119. Schwann cells and nodes of Ranvier are found in (a) neurons (b) chondroblasts (c) osteoblasts (d) gland cells
120. Junction of two neurons is called (a) synapse (b) junction synapsis (c) synapsis (d) synapticula
121. Nerve impulses are conducted towards the cell body by (a) axons (b) ganglia (c) dendrites (d) neurons
122. Afferent nerve fibre carries impulses from (a) effector to central nervous system (b) receptor to central nervous system (c) central nervous system to muscles (d) central nervous system to receptors
123. The surface of nerve fibres bears narrow areas called (a) Schwann (b) Schwann nodes (c) nodes of Ranvier (d) Nissl's granules
124. Most of the human neurons are (a) multipolar (b) bipolar (c) unipolar (d) pseudo – unipolar
125. Units of nervous system are (a) axons (b) neuron (c) dendrites (d) cytons
126. Nissl's granules are found in cyton of nerve cells. These have affinity for basic dyes. The granules are made up of (a) proteins (b) DNA (c) amino acids (d) RNA

Answer

- 1.c 2. B 3. B 4. D 5. B 6. C 7. D 8. A 9. D 10. C 11. D 12. D 13. D 14. B 15. A 16. D 17. A 18. B 19. C 20. D 21. A 22. A 23. B 24. B 25. B 26. A 27. C 28. B 29. A 30. B 31. B 32. C 33. A 34. C 35. B 36. A 37. D 38. B 39. C 40. D 41. B 42. B 43. A 44. C 45. B 46. A 47. D 48. B 49. B 50. A 51. A 52. A 53. A 54. C 55. a 56. A 57. A 58. B 59. C 60. B 61. C 62. C 63. A 64. C 65. D 66. A 67. B 68. A 69. A 70. A 71. B 72. D 73. A 74. A 75. D 76. B 77. C 78. D 79. C 80. B 81. A 82. A 83. B 84. A 85. D 86. A 87. A 88. D 89. B 90. B 91. A 92. D 93. D 94. C 95. C 96. B 97. D 98. B 99. C 100. C 101. B 102. A 103. B 104. D 105. C 106.

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NTSE
animals

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A 107.c 108. B 109. A 110. B 111. B 112. B 113. C 114. D 115. B 116. B 117. A 118. C
119. A 120. A 121. C 122. B 123. C 124. A 145. B 126. D

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