Tissues

D)

Multiple Choice Questions

- 1. Which of the following tissues has dead cells? (a) parenchyma (b) sclerenchyma (c) collenchyma (d) epithelial tissue
- 2. Find out the incorrect statement.

(a) Parenchymatous tissue have intercellular spaces.

(b) Collenchymatous tissues are irregularly thickened at comers.

(c) Apical and intercalary meristems are permanent.

(d) Meristematic tissues, in its early stage, lack vacuoles.

- 3. Girth of stem increases due to
 - (a) apical meristem
 - (b) lateral meristem
 - (c) intercalary meristem
 - (d) vertical meristem.
- 4. Which cell shows presence of fine pits?
 - (a) tracheids (b) companion cells (d) both (b) & (c). (c) sieve tubes
- Intestine absorbs the digested food materials. 5. What type of epithelial cells are responsible for that?
 - (a) stratified squamous epithelium
 - (b) columnar epithelium
 - (c) spindle fibres
 - (d) cuboidal epithelium.
- A person met with an accident in which two 6. long bones of hand were dislocated. Which among the following may be the possible reason?
 - (a) tendon break
 - (b) break of skeletal muscle
 - (c) ligament break
 - (d) areola tissue break
- 7. While doing work and running, you move your organs like hands, legs etc. Which among the following is correct?

(a) Smooth muscles contract and pull the ligament to move the bones.

(b) Smooth muscles contract and pull the tendons to move the bones.

(c) Skeletal muscles contract and pull the ligament to move the bones.

(d) Skeletal muscles contract and pull the tendon to move the bones.

- 8. Which muscles act involuntary?
 - (i) Striated muscles (ii) Smooth muscles
 - (iii) Cardiac muscles (iv) Skeletal muscles
 - (b) (ii) & (iii)
 - (a) (i) & (ii) (c) (iii) & (iv) (d) (i) & (iv)
- Meristematic tissues in plants are 9. (a) localized and permanent (b) not limited to certain regions (c) localized and dividing cells
 - (d) growing in volume
- 10. Which is not a function of epidermis? (a) protection from adverse condition (b) gaseous exchange
 - (c) conduction of water
 - (d) transpiration
- 11. Select the incorrect sentence (a) Blood has matrix containing proteins, salts and hormones.
 - (b) Two bones are connected with ligament (c) Tendons are non-fibrous tissue and fragile.
 - (d) Cartilage is a form of connective tissue.
- Cartilage is not found in 12.
 - (a) nose (b) ear
 - (c) kidney (d) larynx
- 13. Fats are stored in human body as (a) cubical epithelium (b) adipose tissue (c) bones (d) cartilage
- Bone matrix is rich in 14. (a) fluoride and calcium (b) calcium and phosphorus
 - (c) calcium and potassium
 - (d) phosphorus and potassium
- 15. Contractile proteins are found in
- (a) bones (b) blood (c) muscles (d) cartilage
- 16. Voluntary muscles are found in (a) alimentary canal (b) limbs (c) iris of the eye (d) bronchi of lungs
- 17. Nervous tissue is not found in (b) spinal cord (a) brain
 - (c) tendons (d) nerves
- 18. Nerve cell does not contain (a) axon (b) nerve endings (c) tendons (d) dendrites
- 19. Which of the following helps in repair of tissue and fills up the space inside the organ? (a) tendon (b) adipose tissue (c) areola (d) cartilage
- 20. The muscular tissue which function throughout The life continuously without fatigue is (a) skeletal muscle (b) cardiac muscle (c) smooth muscle (d) voluntary muscle

21.	Which of the following cells is found in the					
	cartilaginous tissue of the body?					
	(a) mast cells	(b) basophils				
	(c) osteocytes	(d) chondrocytes				
22.	The dead element present in the phloem is					
	(a) companion cell	(b) phloem fibres				
	(c) phloem parenchyma	a (d) sieve tube				
23.	Which of the following	ng does not lose their				
	nucleus at maturity?					
	(a) companion cells	(b) red blood cells				
	(c) vessel	(d) sieve tube cells				
24.	In desert plants, rate of water loss gets					
	reduced due to the presence of					
	(a) cuticle	(b) stomata				
	(c) lignin	(d) suberin				
25.	A long tree has severa	al branches. The tissue				
	that helps in the sideways conduction of					
	water in the branches i	S				
	(a) collenchyma	(b) xylem parenchyma				
	(c) parenchyma	(d) xylem vessels				
26.	It the tip of sugarcane plant is removed from					
	the field, even then i	t keeps on growing in				
	length. It is due to the	presence of				
	(a) cambium					
	(b) apical meristem					
	(c) lateral meristem					
	(d) intercalary merister	n				
27.	A nail is inserted in th	ne trunk of a tree at a				
	height of 1 metre from the ground level. After					
	3 years the nail will					
	(a) move downwards					
	(b) move upwards					
	(c) remain at the same	position				
••	(d) move sideways					
28.	Parenchyma cells are	al and the instantian				
	(a) relatively unspecified and thin walled					
	(b) thick walled and specialized					
	(c) lignified					
20	(d) none of these	in the				
29.	(a) collonghymag	(b) coloronobyma				
	(a) collenchymas	(d) shlaranshuma				
20	(c) parenciryina Cork colls are made in	(d) childrenchyma				
50.	cork cells are made in	of				
	(a) colluloso	(b) lipids				
	(a) cellulose	(d) lignin				
21	Adinose tissue is	(u) iigiiiii				
51.	(a) connective tissue	(b) supporting tissue				
	(c) vascular tissue	(d) enithelial tissue				
32	Which of the following	is a voluntary muscle?				
52.	(a) skeletal muscle	(b) cardiac muscle				
	(c) smooth muscle	(d) all of these				
		(a) an or these				

33.	A striated involuntar	ry muscle from the			
	following is				
	(a) skeletal muscle	(b) cardiac muscle			
~ ~	(c) visceral muscle (d) all of these				
34.	Connective tissue is der	ived from			
	(a) mesoderm	(b) ectoderm			
25	(c) endoderm (d) all of these				
35.	(a) striated	(b) uptroated			
	(d) stridteu (c) both (c) \mathcal{S}_{1} (b)	(d) none of these			
26	(c) built (d) \propto (b) The structural and fun	(u) none of these			
50.	muscle fibre is				
	(a) sarcolemma	(b) sarcomere			
	(c) sarcoplasm	(d) myofibril			
37.	Strain is caused by exce	ssive pulling of			
•••	(a) muscles	(b) ligaments			
	(c) tendons	(d) nerves			
38.	Cardiac muscles are				
	(a) smooth, spindle shaped and involuntary				
	(b) striated, syncytial and involuntary				
	(c) striated, syncytial and voluntary				
	(d) striated, cross connected and involunt				
39.	Cartilage is produce by				
	(a) osteoblasts	(b) fibroblasts			
	(c) epithelium	(d) chondrocytes			
40.	The myofibrils contain				
	(a) myosin	(b) actin			
	(c) chlorine	(d) both (a) & (b)			
41.	The major constituent of	of vertebrate bone is			
	(a) calcium phosphate (b) sodium chloride				
	(c) potassium hydroxide	e (d) calcium carbonate			
42.	Nails, hooves and horns	s are examples of			
	(a) bony tissue	(b) cartilage tissue			
40	(c) connective tissue	(d) epidermai tissue			
43.	(a) adiposa tissuo				
	(a) adipose tissue				
	(c) white fibrous tissue	(d) areolar tissue			
44	Nerve fibres differ fr	om muscle fibres in			
	having	on muscle nores m			
	(a) myofibrils	(b) striations			
	(c) sarcolemma	(d) dendrites			
45.	Sheath nuclei, Schwar	in cells and nodes of			
	Ranvier are found in				
	(a) neurons	(b) osteoblasts			
	(c) chondroblasts	(d) gland cells			
46.	Nissl's granules are pres	sent in			
	(a) nerve cells	(b) mast cells			
	(c) bone cells	(d) cartilage cells			
47.	Sarcolemma is the membrane that covers				
	(a) nerve fibres	(b) muscle fibres			
	(c) visceral fibres	(d) tendons			

48.	The ends of long bones are composed of				
	cartilage.				
	(a) fibrous	(b) hyaline			
	(c) elastic	(d) calcified			
49.	Which of the following	g is a connective tissue?			
	(a) bone	(b) cartilage			
	(c) blood	(d) all of these			
50.	A characteristic featur	e of cardiac muscle is its			
	(a) fatigue	(b) rhythm city			
	(c) spindle shape	(d) frigidity			
51.	Myelin sheath is prese	ent on			
•=-	(a) cell body	(b) dendrite			
	(c) axon	(d) all of these			
52.	Synanse is				
52.	(a) junction of two axe	f two avons			
	(h) junction of two dendrites				
	(c) junction of avon an	of avon and dondrite			
	(d) junction of cell boo	lioc			
52	The enithelium can	able of recention of			
55.	stimulus is	able of reception of			
	(a) germinal	(h) sensory			
	(c) glandular	(d) nigmented			
54	Parenchyma cells cor	taining air cavities are			
54.	called	itaning an eavities are			
	(a) aerenchyma	(h) sclerenchyma			
	(c) chlorenchyma	(d) prosenchyma			
55.	The most common cor	nective tissue is			
	(a) adipose tissue	(b) reticular tissue			
	(c) fibrous tissue	(d) areolar tissue			
56.	Which of the follo	wing is not true for			
	meristematic tissue?	?			
	(a) It has living, thin w	alled cells.			
	(b) Cells have dense p	rotoplasm,			
	(c) They have no inter	cellular spaces.			
	(d) They store reserve	food material.			
57.	Parenchyma cells con	taining chloroplasts are			
	, called	0			
	(a) parenchyma	(b) sclerenchyma			
	(c) chlorenchyma	(d) prosenchyma			
58.	Cell walls of sclerench	yma are rich in			
	(a) cellulose	(b) pectin			
	(c) lignin	(d) hemicelluloses			
59.	Tendon connects				
	(a) cartilage with muscles				
	(b) bone with muscles				
	(c) ligament with muse	cles			
	(d) bone with bone				
60.	The skeletal tissue pr	esent in the pinna of a			
	, mammal is				
	(a) elastic cartilage				
	(b) fibrous cartilage				
	(c) calcified cartilage				
	(d) hyaline cartilage				

61.	51. Collenchyma differs from parenchyma havir				
	(a) cellulose walls				
	(b) vacuoles				
	(c) pectin deposits at corners				
	(d) living protoplasm				
62.	The thickening of cell wall, lignification's				
021	specialization for mechanical function				
	specialization for mechanical function				
	(a) collepshuma (b) colerenshuma				
	(a) contenenting (b) scienting (b) scienting				
60	(c) chlorenchyma (d) parenchyma				
63.	Bone forming cells are				
	(a) osteoblasts (b) osteoclasts				
	(c) chondroblasts (d) chondroclasts				
64.	Besides calcium phosphate the bones contain (a) calcium chloride				
	(b) magnesium carbonate				
	(c) sodium chloride				
	(d) both (b) & (c)				
65.	Bast fibres in woody stem belongs to				
	(a) cork (b) cortex				
	(c) xylem (d) phloem				
66	A hone left in the dilute HCI for about three				
00.	days will				
	(a) crack into piecos				
	(a) clack into pieces				
	(b) become solt and elastic				
	(c) dissolve completely				
	(d) remain as it is				
67.	Triceps and biceps are examples of				
	(a) voluntary muscle				
	(b) involuntary muscle				
	(c) sphincter muscles				
	(d) smooth muscles				
68.	The strongest muscle in the body is present in				
	(a) arm (b) jaw				
	(c) thigh (d) neck				
69.	Sarcolemma is found over				
	(a) heart				
	(b) skeletal muscle fibre				
	(c) perve fibre				
	(d) none of these				
70	Smooth muscle fibres are				
70.	(a) spindle shaned unbanked non striated				
	(a) spinule-shaped, unbanked, non-schated,				
	(b) spindle shared unbasked untrested				
	(b) spindle-snaped, unbanked, untreated				
	uninucleate and involuntary				
	(c) cylindrical, striated, unbanked, multi-				
	nucleate and voluntary				
	(d) cylindrical, unbanked, non-striated,				
	multinucleate and involuntary.				
71.	Which type of tissue changes the diameter of				
	a Mood vessel?				
	(a) connective (b) nervous				

(d) epithelial

(c) muscle

72.	Smooth muscles occur	in	85.	Sieve tubes have		
	(a) vein	(b) artery		all		
	(c) uterus (d) all of these			(b) perforated and lo	ongitudinal plates	
73.	Cardiac muscle is ma	ade of branched fibres		(c) perforated and ol	blique septa	
	that are			(d) apical and obliqu	e plates	
	(a) no striated and u	inder voluntary control	86.	Sieve tubes are bette	er suited for translocation	
	(b)striated and not und	der voluntary control		because these		
	(c) nonstriated and	not under voluntary		(a) are broader than	long	
	control			(b) possess bordered pits		
	(d) striated and under	voluntary control		(c) possess no end walls		
74.	Muscles, which are im	Muscles, which are immune to fatigue, are			(d) possess a broader lumen and perforate	
	(a) unstrapped muscles (b) cardiac muscles			cross walls		
	(c) jaw muscles	(d) skeleton muscles	87.	Companion cells are	e usually seen associated	
75.	Muscles develop from			with		
	(a) mesoderm	(b) ectoderm		(a) fibres	(b) parenchyma	
	(c) endoderm	(d) all of these		(c) xylem vessels	(d) sieve tubes	
76.	Nerve impulses are o	conducted towards the	88.	Grass stem elongate	s by the activity of	
	cell body by	cell body by		(a) secondary meristem		
	(a) axons	(b) ganglia		(b) intercalary merist	tem	
	(c) dendrites	(d) neurons		(c) apical meristem	(d) primary meristem	
77.	Afferent nerve fibre ca	rries impulses from	89.	Cork cells are		
	(a) effectors to central nervous system			(a) photosynthetic		
	(b) receptor to central nervous system			(b) elongated and participate in movement		
	(c) central nervous system to muscle			(c) meristematic		
	(d) central nervous sys	tem to receptors		(d) dead		
78.	The surface of nerve fibres bears narrow areas called		90.	A tissue is a		
				(a) a group of separate organs that are		
	(a) Schwann cells	(b) Schwann nodes		coordinated in their	activities	
	(c) nodes of Ranvier	(d) Nissl's granules		(b) group of sim	ilar cells that function	
79.	Most of the human ne	urons are		together in a special	ized activity	
	(a) multipolar	(b) bipolar		(c) layer of cells surro	ounding an organ	
	(c) unipolar	(d) pseudo-unipolar		(d) sheet of cells, on	e layer thick	
80.	Units of nervous system	m are	91.	Lateral meristem is r	Lateral meristem is responsible for	
	(a) axons	(b) neurons		(a) growth in parenc	hyma	
	(c) dendrites	(d) cytons		(b) growth in thickness		
81.	A trachea differs from	a vessel in having		(c) growth in cortex (d) growth in length		
	(a) scalar form thickenings		92.	Which of these type	es of cells is most likely to	
	(b) discontinuous lume	en, which are separated		divide?		
	by end wall			(a) epidermis	(b) parenchyma	
	(c) lack of bordered pits			(c) merited (d) xylem		
	(d) thick walls without contents		93.	Simple mechanical tissue devoid of lignin is		
82.	82. Vessels and companion cells are characteristic represented by		represented by			
	of xylem and phloem of			(a) parenchyma	(b) sclerenchyma	
	(a) pteridophytes	(b) gymnosperms	• •	(c) collenchyma	(d) tracheids	
	(c) angiosperms	(d) bryophytes	94.	Which is not a tissue		
83.	Fats are stored in hum	an body as		(a) xylem	(b) phloem	
	(a) cubical epithelium	(b)adipose tissue	~-	(c) collagen	(d) cambium	
0.4	(c) pones	(u) cartilage	95.	You have been pro	vided with narrow thick-	
84.	Irachea, tracheas, wood fibres, and			walled living cells, elongated in shape and		
	parenchymatous tissues are found in			possessing thickenin	gs of centrose and pectin.	
		(d) camana (d)		(a) paranahuma	(b) collonations	
	(c) cortex	(u) phioem		(a) parenchyma	(b) collencityma	
				(c) scierencityilla	(u) periderin	

- 96. The husk of coconut is made up of
 - (a) collenchymas tissue
 - (b) parenchyma tissue
 - (c) parenchyma tissue
 - (d) sclerenchyma tissue.
- 97. Cork is a/an

99.

- (a) intercalary meristem
- (b) lateral meristem
- (c) protective animal tissue
- (d) apical meristem
- 98. Parenchyma occurs in

 (a) mesophytes
 (b) xerophytes
 (c) hydrophytes
 (d) sciophytes
 - Choose the wrong statement
 - (a) The nature of matrix differs according to the function of the tissue,

(b) Fats are stored below the skin and in between the internal organs.

(c) Epithelial tissues have large intercellular spaces between them.

(d) Cells of striated muscles are multinucleate and unbanked.

- **100.** The water conducting tissue generally present in gymnosperm is
 - (a) vessels(b) sieve tube(c) tracheas(d) xylem fibres

FILL IN THE BLANKS

- **1.** ______ are forms of complex tissue.
- 2. Xylem transports _____ and _____ from soil.
- **3.** Phloem transport _____ from ____ to other parts of the plant.
- **4.** _____have tubular cells with perforated walls and are living in nature.
- 5. Epithelial cells with cilia are found in ______of our body.
- 6. Lining of small intestine is made up of _____
- 7. Lining of blood vessels is made up of _____
- 8. The two types of skeletal connective tissue are _____ and _____.
- 9. Dense regular connective tissue consists of ______ and ligaments.
- **10.** Squalors epithelium forms the _____ of the skin and lines cavities and ducts.

TRUE OR FALSE

1. Epithelial tissue is protective tissue in animal body.

- 2. The lining of blood vessels, lung alveoli and kidney tubules are all made up of epithelial tissue.
- **3.** Epithelial cells have a lot of intercellular spaces.
- 4. Epithelial layer is permeable layer.
- Epithelial layer does not allow regulation of materials between body and external environment.
- **6.** Phloem is composed of tracheids and vessels.
- **7.** Meristematic tissue is made of cells that are incapable of cell division.
- Vacuoles are present in abundance in meristematic cells.
- **9.** Xylem is made of tracheas and vessels.
- **10.** Phloem is made of sieve tube and companion cells.
- **11.** Phloem conducts prepared food from the leaves to storage organs and growing parts of the body.
- **12.** Protective tissues are usually present in the Innermost layer of the plant body.
- **13.** Cork cells are living.
- **14.** Bone and cartilage are two types of areolar connective tissue.
- **15.** Squamous and cuboidal are types of nervous tissue.

ASSERTION & REASON QUESTIONS

Directions: In each of the following questions, a statement of Assertion is given and a corresponding statement of Reason is given just below it. Of the four statements, given below, Mark one as the correct answer

(a) *if both Assertion and Reason are true and Reason is not the correct explanation of Assertion*

(b) *if both Assertion and Reason are true hut Reason is not the correct explanation of Assertion*

(c) *if Assertion is true but Reason is false*

(d) if both Assertion and Reason are false

1. Assertion: Non-striated muscles are said to be voluntary in nature.

Reason: Non-striated muscles can be moved according to will.

2. Assertion: Presence of connective tissue inside the brain is essential for conduction of nerve impulse.

Reason: Connective tissue hold together the nerve cells of brain.

3. Assertion: Smooth muscle fibres do not appear I to be striated.

Reason: This is due to regular alternate arrangement of thick and thin filaments in smooth muscle fibre.

4. Assertion: Compound epithelium covers surfaces exposed to mechanical or chemical abrasions.

Reason: Protection of underlying tissues is the major function of simple epithelium.

- Assertion: Materials are exchanged between epithelial and connective tissues by diffusion.
 Reason: Blood vessels are absent in epithelial tissue.
- 6. Assertion: Sclerenchyma fibres constitute the major mechanical tissue of the plants.
 Reason: The cells are thick walled and is made up of cellulose or lignin or both.
- 7. Assertion: Death of sieve tube member results in the death of its adjacent companion cells.

Reason: Both are derived from the same mother cell.

Assertion: Xylem and phloem are complex tissues.
 Reason: Complex tissue is collection of

different types of cells.

Assertion: Permanent tissue is composed of mature cells.
 Reason: Meristematic tissue is a group of

actively dividing cells.

10. Assertion: The rigidity in leaf is due to sclerenchyma.

Reason: Sclerenchyma are dead tissue and provide mechanical strength.