

BCM SCHOOL, BASANT AVENUE, DUGRI, LUDHIANA**ANSWERKEY OF ASSIGNMENT (Date- Aug 25,2026)****CLASS- IX
SUBJECT- SCIENCE**

1	b) Apical meristem									
2	a) Both A and R are true, and R is the correct explanation of A									
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4	<table><tr><th>Basis</th><th>Parenchyma</th><th>Sclerenchyma</th></tr><tr><td>Nature of cell wall.</td><td>Thin, cellulosic wall.</td><td>Thick, lignified wall</td></tr><tr><td>Main function.</td><td>Storage and metabolic activities</td><td>Provides strength and rigidity</td></tr></table>	Basis	Parenchyma	Sclerenchyma	Nature of cell wall.	Thin, cellulosic wall.	Thick, lignified wall	Main function.	Storage and metabolic activities	Provides strength and rigidity
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5	Tissue A: Parenchyma — living cells, thin walls and large intercellular spaces help in storage, gaseous exchange and metabolic activities. Tissue B: Sclerenchyma — dead cells with thick, lignified walls provide mechanical strength and rigidity.									
6	Case Study a) Tissues: Tissue 1: Epithelial tissue Tissue 2: Nervous tissue b) Functions: Epithelial tissue: Covers and protects body surfaces and lines internal organs. Nervous tissue: Transmits electrical impulses and coordinates responses. c) Structural adaptations: Epithelial cells are closely packed, forming a protective covering. Nervous tissue contains elongated nerve cells with processes that help transmit impulses rapidly.									
7	1.Xylem: Conducts water and minerals from roots to other parts of the plant. Its vessels and tracheids form continuous conducting pathways. 2.Phloem: Transports prepared food from leaves to different parts of the plant through sieve tubes and companion cells. 3.Sclerenchyma: Thick, lignified walls provide strength, support and rigidity. 4.Parenchyma: Stores food and other substances and performs basic metabolic activities; chlorenchyma also carries out photosynthesis.									

	5.Together, these tissues provide transport, storage, support and metabolic functions, helping plants grow and survive efficiently.
8	B
9	C
10	B
11	A passenger moves forward when a moving bus suddenly stops due to inertia of motion. Explanation: When the bus stops suddenly, the lower part of the passenger's body comes to rest with the bus, but the upper part tends to continue moving forward due to inertia.
12	Change in Kinetic Energy Given: Mass = 4 kg Initial velocity = 5 m/s Final velocity = 10 m/s Use work energy formula Ans- 150J
13	a)PE 400J b) KE 400j c) v= 20m/s