

## Biology - 12th Class Biology Chapter 16 Short Questions Preparation

Q1. What is callus and its role?

**Ans 1:** Callus is a mass of undifferentiated cells. It heals the wound of plant.

Q2. Characterize collenchyma cells.

**Ans 1:** Collenchyma are living cells which lack secondary wall with angular thickenings. It provides support to the young plants.

Q3. Differentiate between exoskeleton and endoskeleton.

**Ans 1:** Endoskeleton: is advanced form of skeleton. It is living skeleton and causes swift movement of animal with the help of muscles. It lies inside the body of animal.

**Ans 2:** Exoskeleton: is primitive type of skeleton which is non-living and hinders the movement of animal.

Q4. Compare epicuticle and procuticle.

**Ans 1:** Epicuticle: is the outermost layer. It is made up of waxy lipoprotein, so it is impermeable to water and serves as a barrier to microorganisms and insects.

**Ans 2:** Procuticle: is composed of chitin, tough, leathery polysaccharide and several kinds of proteins.

Q5. Define turgor and osmotic pressure.

**Ans 1:** Turgor pressure is pressure exerted by the water on the walls of the vacuole while the osmotic pressure is due to the presence of solute in the water. It is also called solute potential.

Q6. What are disadvantages of exoskeleton?

**Ans 1:** Disadvantages of exoskeleton are.

1. It restricts the growth of animal.
2. It is non-living. It has to be shed periodically and new skeleton should be made.

Q7. Name two paired facial bones.

**Ans 1:** The two paired facial bones are temporal and parietal bones.

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Q8. What is caused and symptoms of Rickets?

**Ans 1:** Rickets is caused by deficiency of calcium or vitamin D in diet. Its symptoms include children with bowed legs and deformed pelvis.

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Q9. What is pulvinus.

**Ans 1:** These are the parenchymatous cells which are present at the base of petiole of some plants. They store water and play a role in the opening and closing of leaves by changing their turgor pressure.

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Q10. Characterize digitigrade animals.

**Ans 1:** Animals which walk on the tips of their digits only are called digitigrades. They run faster than plantigrade animals. In these animals, the first digit usually reduces or is completely lost, as in rabbits and rodents.

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