



Q 7. Give three features of cardiac muscle.

- Ans:**
- **Cardiac muscles are involuntary muscles.**
  - **The cardiac muscle cells are cylindrical, branched and uninucleate.**
  - **These muscles show rhythmic contraction and relaxation throughout the life.**

Q 8. Voluntary muscles are also known as skeletal muscles. Justify. Give two structural characteristics of these voluntary muscles.

- Ans:**
- a. Voluntary muscles are also known as skeletal muscles because they are attached to the bones and help in movement.**
  - b. Voluntary muscles are multinucleated. They show the presence of light and dark bands.**

Q 9. i) Name the tissue present between the internal organs.  
ii) What are their functions?

- Ans:**
- i) Areolar tissue**
  - ii) To provide support to internal organs  
To repair body tissue**

Q 10. Identify the tissue A from the given description and also mention its location in the human body.

Tissue 'A' has cylindrical branched cells and the tissue shows rhythmic contraction and relaxation throughout the life.

- Ans: Cardiac muscle  
Present in the heart.**

Q 11. List in tabular form, two distinguishing features between the Xylem and Phloem.

**Ans:**

<b>Xylem</b>	<b>Phloem</b>
<ul style="list-style-type: none"> <li>• <b>Components: tracheids, vessels, xylem parenchyma and xylem fibres.</b></li> <li>• <b>All xylem elements are dead, except for xylem parenchyma</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Components: sieve tubes, companion cells, phloem parenchyma and phloem fibres.</b></li> <li>• <b>All phloem elements are living, except for phloem fibres</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Conducts water and minerals</b></li> <li>• <b>Xylem also provides mechanical strength to the plant</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Conducts food materials</b></li> <li>• <b>Phloem performs no other function</b></li> </ul>
<ul style="list-style-type: none"> <li>• <b>Conduction is unidirectional – roots to apical parts</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Conduction may be bidirectional.</b></li> <li>➤ <b>Conduction from Leaves → storage organs/growing parts</b></li> </ul>

<ul style="list-style-type: none"> <li>• <b>Conducted through tracheids and vessels</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Conducted through sieve tubes</b></li> </ul>
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**(Accept any two correct points 1+1)**

Q 12. Write two points of difference between Bone and Cartilage

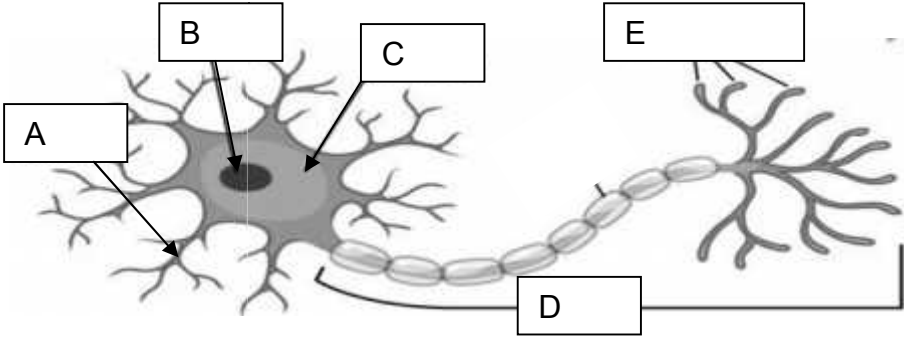
**Ans:**

Bone	Cartilage
<b>Rigid</b>	<b>Flexible</b>
<b>Porous</b>	<b>Nonporous</b>
<b>Matrix mostly made up of calcium and phosphorus compounds.</b>	<b>Matrix made up of protein and Sugars</b>

Q 13. Name the tissue which helps in transportation of oxygen that we inhale to various parts of our body. Write the composition of this tissue.

**Ans: The tissue which helps in transportation of oxygen that we inhale to various parts of our body is blood. Blood is made up of plasma, RBC and WBC, platelets.**

Q 14. Label the following parts of the given diagram.



**Ans: Part labelled as A- Dendrites  
 Part labelled as B- Nucleus  
 Part labelled as C- Cell body  
 Part labelled as D- Axon  
 Part labelled as E- Nerve endings**

