

1) Discuss the advantages & disadvantages of a closed circulatory system.

Advantages:-

- o It is efficient in delivering oxygen throughout an organism.
- o It provides more power in the form of pressure.

o It has a lymphatic system that works separately

Disadvantages :-

- o It is more complex than the open circulatory system
- o It requires more energy for blood distribution.

2) The digestive system of humans is intermediate between that of strict carnivores and that of strict herbivores. How might you expect your digestive system to be different if we had fed exclusively on plant tissues throughout our evolutionary history?

From the stomach, the food now enters the small intestine. This is the longest part of the alimentary canal which is fitted into a compact space because of extensive coiling. The length of the small intestine differs in various animals depending on the

food they eat. Herbivores eating grass need a longer small intestine to allow the cellulose to be digested. Meat is easier to digest.

3) Explain why we become warm during exercise and explain the usefulness of shivering when it is cold.

Our body needs to keep a core temperature of about 98.6°F . To prevent hypothermia and other consequences of a chilled core, your brain monitors temperature very closely. If the surface of your skin gets too chilly, skin receptors send signals to the brain, which gets into motion a series of warming tricks.

4) State whether true or false.

a) The loss of water vapor by a plant is called transpiration. **False**

b) Translocation is the transportation of the products of photosynthesis. **True**

c) Stretching of inner wall of guard cells, open the stomata. **True**

d) Arteries are the widest blood vessels. **True**

e) Bowman's capsule is found in the heart. **False**