

**DELHI PUBLIC SCHOOL
BOKARO STEEL CITY**

ASSIGNMENT FOR THE SESSION 2009-2010

Class : XI

Subject : Biology

Assign. No. 3

1. State the salient features of Algae, Fungi, Bryophytes, Pteridophytes, Gymnosperms, Angiosperms. Mention the types of lifecycle observed in all the groups.
2. What are the main features of a vertebrate? State any four differences between Chondrichthyes, Osteichthyes and Cyclostomata
3. Draw the male reproductive system of cockroach, earthworm, frog. In what ways do they differ from the female reproductive system?
4. Explain the Z scheme of photosynthesis, State the different reactions of dark reactions. How does CAM plants synthesise their metabolites?
5. Depict the ETC operating in inner mitochondrial membrane. Explain chemiosmotic hypothesis
6. Explain the method of transportation of food, water and minerals in tall plants.
7. How is nitrogen metabolised in legumes? State the fate of ammonia taken up by plants and state the enzymes involved
8. Draw the diagram of a part of small intestine where both secretions of liver and pancreas are added. State the role of different enzymes in the small intestine
9. Diagrammatically represent the exchange of gases at different locations of body. What is oxygen dissociation curve?
10. Draw the diagram of vertical section through heart and label the parts. What is cardiac cycle?
11. In different segments of nephron reabsorption as well as secretion of substances take place. Show this with the help of a diagram. What is countercurrent mechanism?
12. Draw the structure of actin and myosin. What is the mechanism of muscle contraction?
13. State the mode of conduction of impulses through axon filament and axon bulb.
14. Explain the mechanism of seeing and hearing with the help of sensory organs.
15. Mention the parts of brain and state their functions. Draw diagram of longitudinal section of brain.
16. Briefly state the role of different endocrine glands along with their secretions. State the mechanism of hormone action.

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