



## परमाणु ऊर्जा शिक्षण संस्था

### Atomic Energy Education Society

ATOMIC ENERGY CENTRAL SCHOOL NO. 2, ANUSHAKTINAGAR, MUMBAI

CLASS-X

SCIENCE WORKSHEET

CHAPTER- LIFE PROCESSES

MARKS-80

#### I. Choose the correct answer:

(10 x 1M =10M)

- Which of the following events in the mouth cavity will be affected if salivary amylase is lacking in the saliva?
  - Starch breaking down into sugars.
  - Proteins breaking down into amino acids.
  - Absorption of vitamins.
  - Fats breaking down into fatty acids and glycerol.
- Which region of the alimentary canal absorbs the digested food?
 

(a) Stomach	(b) Small intestine
(c) Large intestine	(d) Liver
- The contraction and expansion movement of the walls of the food pipe is called:
 

(a) translocation	(b) transpiration
(c) peristaltic movement	(d) digestion
- The breakdown of pyruvate to give carbon di-oxide, water and energy takes place in
 

(a) cytoplasm	(b) mitochondria
(c) chloroplast	(d) nucleus
- Glycolysis process occurs in which part of the cell?
 

(a) Cytoplasm	(b) Nucleus
(c) Mitochondria	(d) Chloroplast
- A blood vessel which pumps the blood from the heart to the entire body:
 

(a) artery	(b) capillary
(c) Vein	(d) Haemoglobin
- Single circulation, i.e., blood flows through the heart only once during one cycle of passage through the body, is exhibited by which of the following:
 

(a) hyla, rana, draco.	(b) whale, dolphin, turtle.
(c) labeo, chameleon, salamander.	(d) hippocampus, exocoetus, anabas.
- Which part of nephron allows the selective reabsorption of useful substances like glucose, amino acids, salts and water into the blood capillaries?
 

(a) Tubule	(b) Glomerulus
(c) Bowman's capsule	(d) Ureter

9. Identify the correct path of urine in the human body.
- (a) Kidney → urinary bladder → urethra → ureter
  - (b) Urinary bladder → ureter → kidney → urethra
  - (c) Kidney → ureter → urethra → urinary bladder
  - (d) Kidney → ureter → urinary bladder → urethra
10. **A plant gets rid of excess water through transpiration. What is the method used by plants to get rid of solid waste products?**
- (a) Shortening of stem
  - (b) Dropping down fruits
  - (c) Shedding of yellow leaves
  - (d) Expansion of roots into the soil

**II. Answer the following questions in one or two sentences:**

11. What is the mode of nutrition in fungi?
12. Name the two stages in photosynthesis.
13. How does amoeba takes its food?
14. State the location and function of gastric glands.
15. 'Stomata remain closed in desert plants during daytime'. How do they do photosynthesis?
16. Diffusion is insufficient to meet the oxygen requirement of multicellular organisms like human. State reason.
17. Name the vein which brings blood to left atrium from lungs.
18. Define excretion.
19. Name any two human excretory organs other than kidney.
20. Write the function of valves present in between atria and ventricles.

**III. Answer the following questions in brief:**

**(10 x 2M=20M)**

21. State the role played by the following in the process of digestion:
  - (i) Enzyme trypsin
  - (ii) Enzyme lipase.
22. Differentiate between autotrophs and hetero trophs and give one example of each.
23. Why is small intestine in herbivores longer than in carnivores?
24. State the form in which the following are stored:
  - (i) Unused carbohydrates in plants.
  - (ii) The energy derived from food in humans.
25. State the function of alveoli in the process of respiration.
26. Rate of breathing in aquatic organisms is much faster than that in terrestrial organisms. Give reasons.
27. Give reasons for the following:
  - (i) Lungs always contain residual volume.
  - (ii) Nostrils are lined with mucus.

28. Explain why plants have low energy needs as compared to animals.
29. Why do ventricles have thicker muscular walls than atria?
30. "Blood circulation in fishes is different from the blood circulation in human beings". Justify the statement.

**IV. Answer the following questions:**

**(5 x 3M=15M)**

31. Explain the significance of photosynthesis. Write the balanced chemical equation involved in the process.
32. Write three points of difference between breathing and respiration.
33. Draw a flow chart to show the breakdown of glucose by various pathways.
34. Draw a diagram of human respiratory system and label: Trachea, Bronchi and Diaphragm.
35. Write three types of blood vessels. Give one important feature of each.

**V. Answer the following questions in detail.**

**(5 x 5M=25M)**

36. Write two water conducting tissues present in plants. How does water enter continuously into the root xylem?
  37. Describe "blood circulation" in human beings.
  38. Describe the structure and function of nephron with the help of diagram.
  39. (a) Name the organs that form the excretory system in human beings.  
(b) Describe in brief how urine is produced in human body.
  40. Explain with the help of neat and well labelled diagrams the different steps involved in nutrition in Amoeba.
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