

**DELHI PUBLIC SCHOOL, DURGAPUR**  
**QUESTION BANK & REVISION SHEET FOR MIDTERM EXAMINATION (2017-18)**  
**CLASS-X**

**SUBJECT: BIOLOGY**

**TOPIC: LIFE PROCESSES**

- Q1. In the process of photosynthesis substance x is formed which gets converted into Y .  
Identify -X & Y. Why does conversion take place?
- Q2. Mucus is not used for digestion in stomach , still it is secreted. What is its function?
- Q3. Name the following.
- (i) Product of Carbondioxide combining with haemoglobin.
  - (ii) The thickest chamber of our heart.
  - (iii) Cartilagenous flap in our wind pipe that prevents food from entering into trachea.
  - (iv) Vestigial part of human digestive system.
  - (v) Plants that open stomata at night.
  - (vi) Pressure exerted by all the cells of root when they are in turgid condition.
  - (vii) Structure in kidney known as Dialysis bags
- Q4. If we observe and count the number of times a fish opening and closing its mouth and compare with our chest movement , what will be your expected conclusion?
- Q5. How does blood of mammal differ from that of insects?
- Q6. Leaves of a healthy potted plant is covered with petroleum jelly. How will it affect the state of the plant? State two processes that will be affected.
- Q7. Differentiate between afferent and efferent arteriole, Pulmonary artery and Pulmonary vein.
- Q8. If all the green plants are removed then life cannot be sustained. Explain.
- Q9. Where does breakdown of Pyruvate takes place in a living cell? Name the end products.
- Q10. Why anaerobic respiration produces less energy than aerobic respiration?
- Q11. While eating we should not talk. Give reason.
- Q12. Respiration is a vital process for all living organism. Explain.
- Q13. What could happen if diaphragm of a person ruptures in an accident?
- Q14. State the composition of lymph , blood and sweat.
- Q15. How is the small intestine adapted to absorb the digested food?
- Q16. Why is the rate of Photosynthesis more on a sunny day than on a cloudy day?
- Q17. Draw and label the urinary system in man.
- Q18. What is the role of light in Photosynthesis?
- Q19. Draw the structure of heart and label the valves and blood vessels.
- Q20. What is a portal vein?
- Q21. How is butter in our food digested and absorbed in our body?
- Q22. What is the source of Oxygen for green plants?
- Q23. Name the organ system responsible for excretion and osmoregulation.
- Q24. Which glands are present in our alimentary canal and write their function.
- Q25. Besides HCl, which enzymes are present in the gastric juice/ What role do they play?

**TOPIC: CONTROL AND COORDINATION**

- Q1. Define: hormones, receptors, effector muscles, synapse.
- Q2. Differentiate between tropic and nastic movements, conditioned and unconditioned reflex.
- Q3. Why do people staying in hills suffer from Goitre as compared to those living near sea coast?
- Q4. How does the body react when Adrenaline is secreted?
- Q5. Name two phytohormones that help in growth How do they function?

Q6. Name the following.

(i) hormone that helps in fighting stress (ii) phytohormone which is gaseous (iii) Hormone that helps in growth in man (iv) part of brain that controls respiration, heartbeat

Q7. Differentiate between ABA and Gibberellin.

Q8. What happens between two nerve cells?

Q9. What are the functions of ---- hypothalamus, cerebellum, pons?

Q10. How can diabetic patients control their level of sugar in blood?

Q11. State the difference between tropic and nastic movement.

Q12. What is reflex arc? Draw a diagram to explain it.

Q13. We are able to taste food when placed on our tongue. Some are able to smell and predict the source also. In both cases identify the structure responsible.

Q14. How does Auxin help the weak plants to climb around support?

Q15. What are the changes seen within adolescent boys and girls?

Q16. The response in plants is delayed as compared to animals. Explain.

Q17. How is the coordination brought about in the animals?

Q18. Where in the nerve cell, conversion of electrical into chemical energy takes place?

### **TOPIC : SOURCES OF ENERGY**

Q1. What are the characteristics of a good fuel?

Q2. Which sources of energy can be utilized in India?

Q3. Name the conventional fuels used? What are its limitations.

Q4. Discuss how hydroelectric plants may be dangerous for the environment..

Q5. What are the advantages of using solar cooker.

Q6. How can we use the solar energy? Explain.

Q7. "The rural India can thrive on Biogas to light their homes". Justify this statement.

Q8. What is Ocean Thermal energy? How is it utilized?

Q9. Explain the chemical reaction that takes place in nuclear reactor.

Q10. What are the disadvantages/limitations of using

(a) wind energy (b) tidal energy (c) wave energy (d) solar energy

Q11. What is Geothermal energy?

Q12. Which gas is the main component found in Natural gas?

Why can we use it as a better fuel than coal?

Q13. What is the full form of LPG, CNG. Where are they used?

Q14. Suggest two ways how you can reduce air pollution in metro cities--- Delhi & Mumbai by usage of alternative fuels.

Q15. Why can't we use Hydrogen in place of CNG or LPG though we use it as rocket fuel?

### **SYLLABUS FOR MIDTERM:**

Life Processes

Control and coordination

Sources of energy