

## REVISION QUESTIONS FOR FINAL TERM, CLASS- 7, SESSION 2017-18, Biology

### PHOTOSYNTHESIS

1. Define: Photosynthesis, Autotrophic nutrition.
2. What does a plant require for preparing food?
3. State the adaptations of leaves for performing photosynthesis.
4. Describe the process of opening and closing of stomata. Give labelled diagrams.
5. What is vascular system? What is its function?
6. How does the following factors affect photosynthesis?
  - a) Carbon- dioxide
  - b) Light
  - c) Temperature
7. State the fate of the end products of photosynthesis.
8. How does utilization and transportation of prepared food occur in plants?
9. State the significance of photosynthesis.
10. Design the following experiments to show.
  - a) Starch is produced during photosynthesis.
  - b) Chlorophyll is necessary for photosynthesis.
  - c) Light is necessary for photosynthesis.
  - d) Oxygen is given out during photosynthesis.

### RESPIRATION IN PLANTS AND ANIMALS

1. Define: Respiration, Inhalation, Exhalation.
2. Give the word equation for aerobic and anaerobic respiration.
3. Give the chemical equation of aerobic respiration.
4. State the respiratory organs on the following organisms:
  - a) Whale
  - b) Fish
  - c) Frog
  - d) Insect
  - e) Bird
5. How can you prove that inhaled air contains less carbon-dioxide than exhaled air?
6. How do plants breathe?
7. Root of a plant was immersed in a bottle containing alkali solution to which phenolphthalein was added. What would be your observation after a few hours? Give reasons in support of your statement.
8. Give reasons:
  - a) Gardeners loosen the soil near the roots.
  - b) *Yeast* is used in bakeries.
  - c) Muscle cramp occurs after a strenuous exercise.
  - d) Respiration rate increases as you go higher up the hills.
9. What is the normal respiration rate? When does it alter?
10. State the differences between:
  - a) Larynx and Pharynx
  - b) Bronchi and Bronchioles
  - c) Internal respiration and External respiration
11. State the functions of:
  - a) Epiglottis
  - b) Alveolus
  - c) Trachea
  - d) Nasal hair
  - e) Mucous
  - f) Network of capillaries
12. How is the inhaled air conditioned before entering the lungs?
13. What is oxyhaemoglobin? How does it transport oxygen to all parts of the body?
14. State the role of diaphragm, chest muscles and ribcage in the process of breathing.
15. Draw a labelled diagram to show the exchange of gases in an alveolus.

## TRANSPORT AND EXCRETION

### Transport in plants

1. Differentiate between xylem and phloem.
2. Why is transport system necessary in plants and animals?
3. Define the following:
  - a) Semipermeable membrane
  - b) Osmosis
  - c) Transpiration
4. Design an experiment to show:
  - a) Xylem conducts water.
  - b) Transpiration occurs in plants.
  - c) Phloem transports food.
5. Name the two forces responsible for ascent of sap.

### Circulatory System

1. Name the components of the circulatory system.
2. Differentiate between R.B.C. and W.B.C. on the basis of their structure and function.
3. Differentiate between artery and vein based on structure, type of blood carried and origin.
4. Draw a schematic diagram to show the pathway of blood circulation.
5. Give reasons for the following:
  - a) Heart is partitioned into four chambers.
  - b) Valves are present in veins but not in arteries.
  - c) Heart beat corresponds to pulse.
6. Explain the conditions at which heart rate alters.
7. Draw labelled diagrams of:
  - a) Cross section of blood vessels
  - b) Blood cells

### Removal of waste

1. Define excretion.
2. Explain the role of skin as an excretory organ and in controlling body temperature.
3. How is urine formed in the kidneys?
4. What happens when both kidneys of a person are damaged? State the remedy.
5. Draw labelled diagrams of:
  - a) Urinary system
  - b) Nephron

## HOW ANIMALS ADAPT

1. Give reasons for the following:
  - a) Polar bears, yaks, ermines have a thick fur.
  - b) Snakes and lizards of desert aestivate.
  - c) Most desert animals are nocturnal.
  - d) Monkeys have a long coiled tail.
  - e) Ears of elephants are large.
  - f) Browsers and grazers have long legs.
2. Differentiate between :
  - a) Hibernation and Aestivation
  - b) Browsers and Grazers
3. "Migration is necessary for certain fishes and birds". Explain.
4. State the adaptation of the following animals:
  - a) Tropical tigers
  - b) Penguins
  - c) Asiatic elephants
  - d) Camels

### FIBRES FROM ANIMALS (SILK)

1. Give reasons for the following:
  - a) Some eggs are kept for hatching apart from silk production.
  - b) Moulting is necessary in silkworms.
  - c) Pupa re killed after eight days of cocoon formation.
  - d) Fibres are soaked in solution of salts of tin, lead and iron.
2. Differentiate between:
  - a) Larvae and Pupae
  - b) Organzine and Tram
  - c) Throwing and Weighting
3. Define the following:
  - a) Sericulture
  - b) Bleaching
  - c) Dyeing
  - d) Cocoon
4. Draw the life cycle of silk moth.
5. Give the steps of sericulture.

### FORESTS

1. State the importance of forests in our daily life.
2. How does the forest protect our environment? Discuss on the basis of checking pollution, controlling rainfall and temperature, floods and draughts, maintaining natural balance of gases, controlling soil erosion.
3. Give reasons for the following:
  - a) A single tree benefits many organisms.
  - b) Plants and animals both depend on each other.
  - c) Food chains become interlinked to form food web.
4. What do you mean by extinct? Name some animals that have become extinct.