BRAIN INTERNATIONAL SCHOOL

SESSION 2024-25

CLASS: X **TERM 1 REVISION SHEET** **SUBJECT: BIOLOGY**

Chapter -5 life processes

MULTIPLE CHOICE QUESTIONS

1. The contraction and expansion movement of the walls of the food pipe is called:
   (a) translocation
   (b) transpiration
   (c) peristaltic movement
   (d) digestion

2. Choose the correct path of urine in our body

   (a) kidney →ureter →urethra →urinary bladder

   (b) kidney →urinary bladder →urethra →ureter

   (c) kidney →ureters →urinary bladder →urethra

   (d) urinary bladder →kidney →ureter →urethra

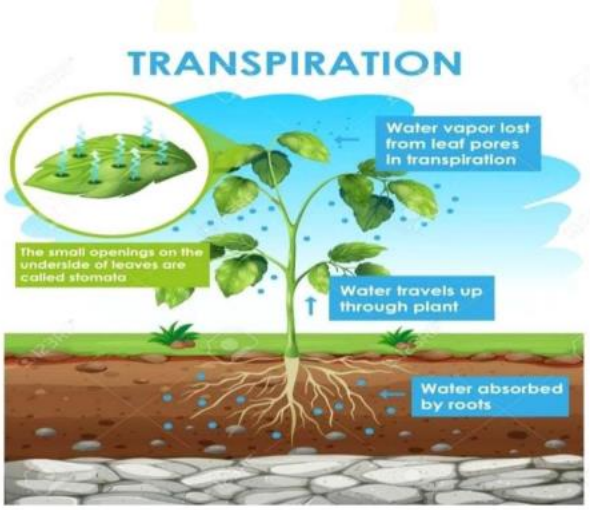
ASSERTION AND REASON QUESTIONS

The following questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:
(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A
(c) A is true but R is false.
(d) A is false but R is true.

3. Assertion (A): Diffusion does not meet high energy requirements of multi-cellular organisms

   Reason (R) : Diffusion is a fast process but occurs at the surface of the body.

CASE STUDY QUESTION



4. Plants absorb water and minerals by the roots. The roots have root hair. The root hair increase the surface area of the root for the absorption of water and mineral nutrients dissolved in water. The root hair is in contact with the water present between the soil particles. Plants have pipe-like vessels to transport water and nutrients from the soil. The vessels are made of special cells, forming the vascular tissue. A tissue is a group of cells that perform specialized function in an organism. The vascular tissue for the transport of water and nutrients in the plant is called the xylem.The xylem forms a continuous network of channels that connects roots to the leaves through the stem and branches and thus transports water to the entire plant. One thing is very interesting here that when gravity pulls everything downwards, then how the water can rise up against gravity. There are only two possibilities, either the water is being pushed from below or the water is being pulled from the top of the plant. Now the question is which force is strong. It is very similar to the principle behind the sipping of softdrink from a bottle with a straw.

i) Name the force responsible for upward pulling of water.

(a) Gravitational force
(b) Magnetic force
(c) Muscular force
(d) Suction pull

ii) Group of cells that transport food in plants is called?
(a) xylem
(b) phloem
(c) tissue
(d) all of these

iii). The process in which water is lost as water vapour from the aerial parts of the plants through stomata is called
(a) evaporation
(b) transpiration
(c) translation
(d) sucking

iv) Plants wither when
(a) xylem stops
(b) the epidermis is removed
(c) cortex is removed
(d) phloem stops

iv) What type of water absorption takes place in plants by the process of more transpiration?
(a) Active absorption
(b) Passive absorption
(c) none of these
(d) both A And b

LONG ANSWER QUESTIONS

5. (a)Draw a schematic representation of transport and exchange of oxygen and carbon dioxide during transportation of blood in human beings and label on it:
Lung capillaries, Pulmonary artery to lungs, Aorta to body, Pulmonary veins from lungs.

(b) What is the advantage of separate channels in mammals and birds for oxygenated and deoxygenated blood?

6. State the role of the following in human digestive system :

(I) Digestive enzymes (II) Hydrochloric acid (III) villi

CH.6. CONTROL AND COORDINATION

1. Which of the following statements is correct about receptors?

(a) Gustatory receptors detect taste while olfactory receptors detect smell

(b) Both gustatory and olfactory receptors detect smell

(c) Auditory receptors detect smell and olfactory receptors detect taste

(d) Olfactory receptors detect taste and gustatory receptors smell

2. Which is the correct sequence of the components of a reflex arc?

(a) Receptors → Muscles → Sensory neuron → Motor neuron → Spinal cord

(b) Receptors → Motor neuron → Spinal cord → Sensory neuron → Muscle

(c) Receptors → Spinal cord → Sensory neuron → Motor neuron → Muscle

(d) Receptors → Sensory neuron → Spinal cord → Motor neuron → Muscle

ASSERTION AND REASON QUESTIONS

3. Assertion (A) : Insulin regulates blood sugar level.

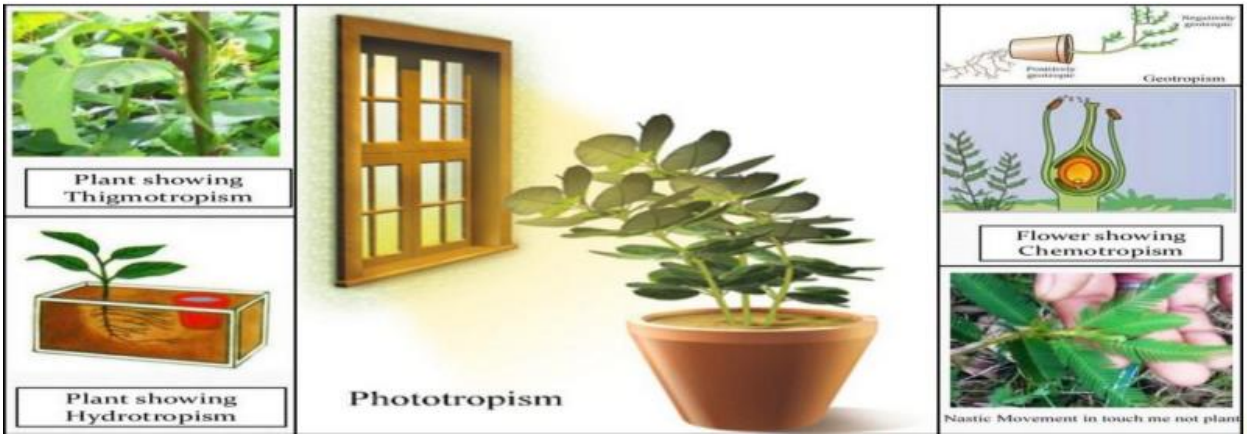
Reason (R) : Insufficient secretion of insulin will cause diabetes.

4. Assertion (A) : Animals can react to stimuli in different ways.

Reason (R) : All animals have a nervous system and an endocrine system involving hormones.

CASE STUDY BASED QUESTIONS

5. Read the passage carefully and answer the questions given below. The control and coordination in plants is done by plant hormones. The plant hormones coordinate the activities of the plant by controlling one or the other aspect of the growth of the plant. So, the plant hormones are also known as plant growth substances. The growth of a plant can be divided into three stages B cell division, cell enlargement and cell differentiation (or cell specialization), and these stages have particular locations in a plant.



These three stages of plant growth as well as promotion of dormancy, breaking of dormancy, stomata control, falling of leaves, fruit growth, ripening of fruits and ageing in plants are controlled by the various plant hormones

i. By which hormone the control and coordination of plants is done?

a. Photohormones b. Phytohormones c. adrenal hormones d. growth hormones

ii. Which hormone promotes cell division?

a. Auxins b. Gibberellins c. Cytokinins d. Abscisic acid

iii. Which hormone promotes cell the dormancy in seeds and buds?

a. Auxins b. Gibberellins c. Cytokinins d. Abscisic acid

iv. Which hormone promotes the wilting and falling of leaves?

a. Auxins b. Gibberellins c. Cytokinins d. Abscisic acid

v. Plant hormones are

a. Physical substances b. chemical substances c. photo chemical substances d. both a and b

LONG ANSWER QUESTION

6. Describe an activity to illustrate the phenomenon of phototropism and explain why does this occur.

7. Draw a labelled diagram of human brain.

Discuss functions of cerebrum, cerebellum and medulla.

CHAPTER 13 OUR ENVIRONMENT

MULTIPLE CHOICE QUESTIONS

1. In a given food chain if the amount of energy at the fourth trophic level is 6 kJ, what will be the energy available at the producer level?

(a) 6000 kJ

(b) 20 kJ

(c) 60 kJ

(d) 600 kJ

2 . Which of the following is a biodegradable waste?

(a) DDT

(b) Aluminium can

(c) Plastic bag

(d) Cow dung

3. Which of the following is the best way for disposal of vegetable and fruit peels?

(a) Landfill

(b) Recycling

(c) Composting

(d) Burning

ASSERTION REASON TYPE QUESTIONS

4. Assertion (A) : Food chain is responsible for the entry of harmful chemicals in our bodies.

Reason(R) : The length and complexity of food chain vary greatly.

CASE STUDY QUESTIONS

5. Read the following and answer the questions: The atmosphere is a blanket of air and a precious natural resource for sustaining life on the Earth. Unfortunately, human activities based on national/personal interests are causing harm to this common resource, notably by depleting the fragile ozone layer, which acts as a protective shield for life on the Earth. Ozone molecules consist of three oxygen atoms, Ozone molecules are exceeding rare: fewer than ten in every million molecules of air. However, for nearly a billion years, their presence in the atmosphere has played a vital role in safeguarding life on Earth. The ozone in the troposphere (up to 110 kilometres above the Earth's surface) is 'bad' ozone which can damage lung tissues and plants. But about 90 per cent of ozone found in the stratosphere (between 10 and 40 kilometers above the Earth's surface) is "good" ozone which plays a beneficial role by absorbing dangerous ultraviolet (UV-B) radiations from the Sun. Without this beneficial ozone layer, humans would be more susceptible to certain diseases due to the increased incidence of ultraviolet rays from the Sun.

i. Ozone molecules consists of

(a) Three oxygen atoms only (b) two oxygen atoms only (c) Only one atom of oxygen (d) None of the above

ii. Depletion of ozone layer is mainly due to

(a) Use of CFC's (b) Use of halogens (c) Both (a) and (b) (d) None of the above

iii. U-V rays can cause diseases in humans like

(a) Skin cancer only (b) Cataract only (c) Lung cancer (d) Both (a) and (b)

iv. Ozone holes are more pronounced at the:

(a) Equator (b) Tropic of cancer (c) Tropic of Capricorn (d) Poles

v. Which of the following is an ozone depleting substance?

(a) Sulphur dioxide (b) Methyl chloride (c) Carbon dioxide (d) Methane

LONG ANSWER TYPE QUESTIONS

6. Suggest any four activities in daily life which are eco-friendly.

7. "Energy flow in a food chain is unidirectional". Justify this statement. Explain how the pesticides enter a food chain and subs