પુ·ના International School

Shree Swaminarayan Gurukul, Zundal

PERIODIC ASSIGNMENT 3- 20221-22	
Grade – 6	**Subject-SCIENCE**
Syllabus – CH-9,10,11,	**FROM TEXTBOOK**

❖ **Multiple Choice Questions :-**

1. Which of the following is a biotic components

(a) Water (b) Air **(c) Decomposer** (d) Soil

2. Xerophytes are plants which are found in

(a) Deserts (b) Sea (c) Ponds (d) Marshes

3. Which of these adaptations is not shown by a camel for living in deserts?

(a) Has a hump on its back. (b) Passes scanty of urine.

(c)Perspires a lot (d)The sole of feet have sort of pads.

4. The place where a living organism live is called

(a) Habitat (b) Habit (c) House (d) Room

5. The movement of earth around the sun is an example of

(a)Circular motion **(b)Periodic motion**

(c) Oscillatory motion (d) Translatory motion

6. The standard unit of length in SI system is

(a)Yard (b)Foot **(c) Meter** (d) Centimeter

7. What device should a tailor use to measure the length of cloth?

(a) Measuring **(b) rod** (c)Measuring tape (d)Scale String

8. One cm is equal to

(a)10 mm (b)1 km (c)1000 m (d) 1 m

9. Which one is a transparent object?

a. Stone **b. Reading glass** c. Wax paper d. Dense fog

10. Light is a form of

a. Energy b. Power c. Mass d. Length

11. Which of the following will not form circular shadow

a. A circular disk **b. Shoe box** c. Ice-cream cone d. A ball

12. Shadow is formed by

a. Transparent object b. Translucent object **c. Opaque object** d. All of these.

❖ **Fill in the blanks.**

(1) Saline water, hot air and sand are **Abiotic** components of a habitat.
(2) The habitat of plants and animals that live in **Water** is called the aquatic habitat.
(3) **Adaptations** enable a plant or an animal to live in its surroundings.
(4) Plants and animals that live on land are said to live in **Terrestrial** habitats.

(5) The presence of specific features, which enable a plant or animal to live in a particular habitat, is called **adaptation**.
(6) The habitats of the plants or animals that live on land are called **terrestrial** habitat.
(7) The habitats of plants and animals that live in water are called **aquatic** habitat
(8) Soil, water and air are the **abiotic** factors of a habitat.
(9) Changes in our surrounding that make us responds to them are called **stimuli**.

(10) Motion of an object or a part of it around a fixed point is known as **circular** motion.

(11) A body repeating its motion after certain interval of time is in **periodic** motion.

(12) In rectilinear motion, object moves **along** a **straight** line.

(13) SI unit of length is **metre.**

(14) Transparent object do not caste any shadow.

(15) Shadows give us information about the **Shape** of the object.

❖ **Match the following**

1.

Column A	Column B
a. Octopus	i. Polar regions
b. Hydrilla	ii. Forest
c. Cactus	iii. Sea
d. Tiger	iv. Desert
e. Arctic fox	V. Ponds

(a) (iii); (b) (v); (c) (iv); (d) (ii); (e) (i)

2.

Column A	**Column B**
a. Length of a rod	i. Vernier calipers
b. Mass of an object	ii. Litre
c. Small thickness	iii. Kilogram
d. Area of surface is measured in	iv. Square metre
e. Amount of liquids is measured in	v. metre

(a) – (v), (b) – (iii), (c) – (i), (d) – (iv), (e) – (ii).

3.

Column A	**Column B**
a. Moon	i. Translucent
b. Sun	ii. Opaque
c. Brick	iii. Reflecting surface
d. Mirror	iv. Luminous
e. Tracing paper	v. Non-luminous

(a) – (v), (b) – (iv), (c) – (ii), (d) – (iii), (e) – (i).

❖ **Short Question Answer**

1. Unscramble the given words below to get the correct word using the clues given against them.

(a) SATPADAOINT specific features or certain habits which enable a living being to live in its surroundings
(b) RETECOXNI Waste products are removed by this process
(c) LUMISIT All living things respond to these
(d) ROUCDPRENTOI Because of this we find organisms of the same kind

Ans. (a) ADAPTATIONS

(b) EXCRETION

(c) STIMULI

(d) REPRODUCTION

2. Using the following words, write the habitat of each animal given in Fig. 9.1 (a to d).
Grassland, Mountain, Desert, Pond, River

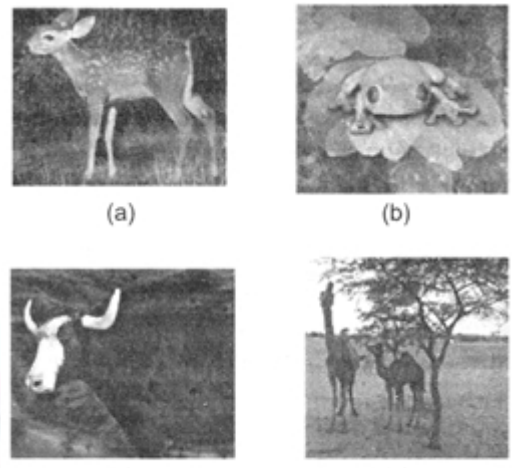

Fig. 9.1

Ans. (a) Grassland

(b) Rain forests

(c) Mountain

(d) Desert

3. Classify the following habitats into terrestrial and aquatic types.
Grassland, Pond, Ocean, Rice field

Ans. Terrestrial habitats - grassland, rice field.

Aquatic habitats - pond, ocean.

4. Why is reproduction important for organisms?

Ans. Reproduction is necessary for organisms because

a) it is the mode of producing offspring of their own kind

b) to maintain the continuity of species

c) carrrying hereditary characters to next generation.

5. Write the adaptation in aquatic plants due to which

(a) submerged leaves can bend in the flowing water.

(b) leaves can float on the surface of water.

AYAN SNASKAR DEEP TRUST
SHREE SWAMINARAYAN SANSKAR DHAM(GURUKUL) - ZUNDAL
पु.ना
ZUNDAL

Ans. (a) Leaves are narrow and ribbon like.

(b) Stems/stalks of leaves are long, hollow and light.

6. Mention one adaptation present in the following animals:

(a) In camels to keep their bodies away from the heat of sand.

(b) In frogs to enable them to swim.

(c) In dolphins and whales to breathe in air when they swim near the surface of water.

Ans. (a) Long legs and puffed feet

(b) Webbed feet

(c) Blow holes and under developed lungs

7. What is a habitat?
Answer: The surrounding where plants and animals live, survive and reproduce is called their habitat.

8. How are cactus adopted to survive in a desert??
Answer: Adaptation of cactus in desert:
(i) The Leaf is modified to spine to reduce transpiration.
(ii) Photosynthesis is carried by the stems.
(iii) The stem is covered by thick waxy layer that helps to retain water.
(iv) Cactus have roots that go very deep into the soil for absorbing water.

9. The height of a person is 1.65 m. express it into cm and mm.

Answer: 1.65 m = 1.65 X 100 cm = 165 cm. (1 m = 100 cm)

1.65 m = 165 cm = 165 X 10 mm = 1650 mm (1cm = 10 mm)

10. The distance between Radha's home and her school is 3250 m. express this distance into km.

Answer: 3250 m = 3250/1000 km = 3.250 km (1 m = 1/1000 km)

11. While measuring the length of a knitting needle, the reading of the scale at one end is 3.0 cm and at the other end 33.1 cm. What is the length of the needle?

Answer: Length of needle = final reading - Initial reading = 33.1 cm – 3.0 cm = 30.1 cm.

12. Write the similarities and differences between the motion of a bicycle and ceiling fan that has been switched on.

Answer: Similarities: - Wheel of a bicycle and ceiling fan both shows circular motion.

Differences: - Cycle moves in rectilinear motion but ceiling fan does not move in rectilinear motion.

13. Why could you not use an elastic measuring tape to measure distance? What would be some of the problems you would meet in telling someone about a distance you measured with an elastic tape?

Answer: Elastic tap will not give accurate measurement because it stretches in length and reduces in size when not stretched. While telling the measurement taken with an elastic tape. We have to tell whether the tape was stretched and by how much. This is very difficult.

14. Give two examples of periodic motion.

Answer: Example of periodic motion-
(i)Pendulum
(ii)Child on the swing.

15. Observe the picture given in Fig. 11.6. A sheet of some material is placed at position 'P', still the patch of light is obtained on the screen. What is the type of material of this sheet?

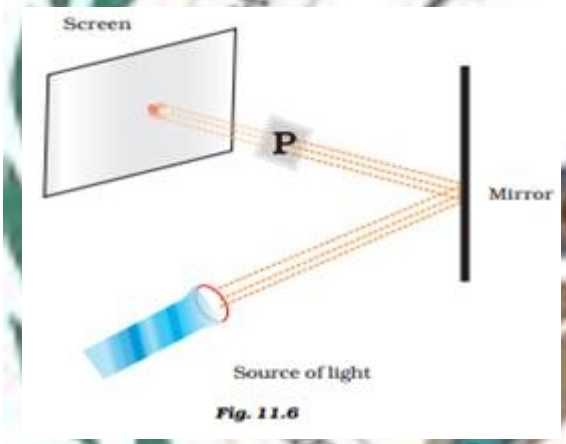

Fig. 11.6

Ans. A sheet of transparent material must have been placed at position P due to which the light from the torch got reflected from mirror and the patch of the light could be obtained on the screen.

16. Three torches A, B and C shown in Fig. 11.7 are switched on one by one. The light from which of the torches will not form a shadow of the ball on the scree

Fig. 11.7

Ans. The torch at position C could not form an image of the ball on screen because to get an image on the source of light falling on the object must be opposite to the screen.

17. Look at the figure given in Fig. 11.8.

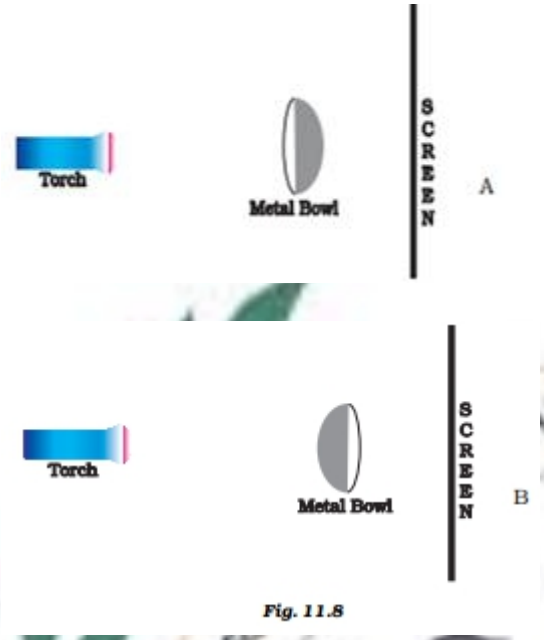

Fig. 11.8

Will there be any difference in the shadow formed on the screen in A and B.

Ans. No, there would not be any difference between the images formed in case A and case B as the object is same.

18. You are given a transparent glass sheet. Suggest any two ways to make it translucent without breaking it.

Ans. A transparent material can be made translucent by using following steps:

(i) Applying oil, grease, and butter on the surface of the transparent glass.

(ii) Pasting butter paper on the surface of the transparent glass.

(iii) Rubbing the surface of the transparent glass by any rough material.

19. A torch is placed at two different positions A and B, one by one, as shown in Fig. 11.9.

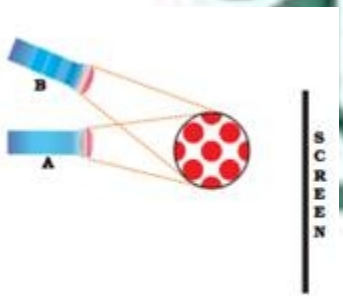

Fig. 11.9

The shape of the shadow obtained in two positions is shown in Fig. 11.10.

Fig. 11.10

Match the position of the torch and shape of the shadow of the ball.

Ans. A → a

B → b

If the angle of incident light is smaller, the shadow is longer. On the other hand, if the angle of incident light is bigger, the shadow is smaller. This explains, why our shadows are longer in the morning and evening and smaller in the noon.

20. A student covered a torch with red cellophane sheet to obtain red light. Using the red light, she obtains a shadow of an opaque object. She repeats this activity with green and blue light. Will the colour of the light affect the shadow? Explain.

Ans. Changing the colour of light will not affect the shadow. This is due to the fact that shadow is a dark patch formed when the path of light is obstructed by an object which inhibits the light from reaching in the shadow region.

21. Is air around us always transparent? Discuss.

Ans. Normally air around us is transparent but due to the occurrence of thick smoke, fog, or thick clouds, etc. the air does not remain transparent any more.

❖ Long Questions Answers:-

1. Like many animals although a car also moves it is not considered as a living organism. Give 2-3 reasons.

Ans. Both living organisms and car move but the difference is that living organisms move on their own as they have life. But car is a non living thing which is operated by an individual. It requires fossil fuel to move . Another reason that proves that car is not a living thing is the absence of life processes like respiration, reproduction, excretion, ingestion, growth etc which are the characteristics of living things.

2.What are the adaptive features of a lion that helps it in hunting?

Ans. Adaptations of lion which helps it to easily catch its prey are as follows:

(a) The colour of its body and mane is brown which helps it to hide amongst bushes and open area thereby avoid detection by its prey.

(b) Eyes placed in front allow it to know the exact location and movements of its prey.

(c) Powerful paws and long claws enable it to catch and kill the prey.

(d) Its active approach to catch its prey through neck and inserting its front canine teeth on it.

3. A football match is being played at night in a stadium with flood lights ON. You can see the shadow of a football kept at the ground but cannot see its shadow when it is kicked high in the air. Explain.

Ans. We can see the shadow of football lying on the ground because the ground act as a screen or it. But when the football is kicked high, the ground which is acting as a screen gets away from the football hence no shadow of the football will be formed on the ground.

4. A student had a ball, a screen and a torch in working condition. He tried to form a shadow of the ball on the screen by placing them at different positions. Sometimes the shadow was not obtained. Explain.

Ans. (i) May be the screen where the image will be formed is away from the ball.

(ii) The beam of light from the torch is falling parallel to the screen on the ball.

(iii) May be the torch is kept away from the ball.

5. A sheet of plywood, a piece of muslin cloth and that of a transparent glass, all of the same size and shape were placed at A one by one in the arrangement shown in Fig. 11.12. Will the shadow be formed in each case. If yes, how will the shadow on the screen be different in each case? Give reasons for your answer.

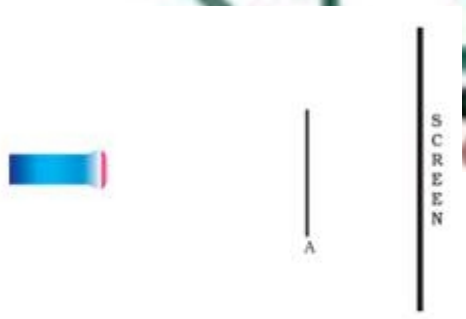

Fig. 11.12

Ans. The sheet of plywood is an opaque object and will form a dark patched shadow on the screen because it completely obstructs the path of light.

Whereas the piece of muslin cloth ias a translucent object and will form a lighter shadow because it allows light to pass through it partially.

The transparent glass will allow the ray of light to pass through it and hence does not form any shadow.

6. Four children measure the length of a table which was about 2 m. Each of them used different ways to measure it.

(i) Sam measured it with a half metre long thread.

(ii) Gurmeet measured it with a 15-cm scale from her geometry box.

(iii) Reena measured it using her hand span.

(iv) Salim measured it using a 5-m long measuring tape.

7. Three students measured the length of a corridor and reported their measurements. The values of their measurements were different. What could be the reason for difference in their measurements? (Mention any three)

Ans. Difference in their measurements could be due to following reasons:

i. They may have used different measuring devices.

ii. The device used by three of them may have different least measurable length.

iii. It is possible that the end of the corridor may not be accessible to measure.

iv. The devices used for measuring may be faulty or not properly standardized.

SHREE SWAMINARAYAN SNASKAR DEEP TRUST
SHREE SWAMINARAYAN SANSKAR DHAM (GURUKUL) - ZUNDAL
पु ना
ZUNDAL