

Goa Board
Class VI Science
Term 1
Sample Paper - 1 Solution

Time: 3 hrs

Total Marks: 100

SECTION A

- 1. Ans.** Correct Option: [A]
Solution: Iodine is required for the proper functioning of the thyroid gland.
- 2. Ans.** Correct Option: [D]
Solution: Buffaloes are herbivores and consume only plant products.
- 3. Ans.** Correct Option: [C]
Solution: Sepals protect the flower when it is in the bud form.
- 4. Ans.** Correct Option: [A]
Solution: Leaves of plants with a fibrous root system show parallel venation.
- 5. Ans.** Correct Option: [B]
Solution: The ribcage protects the heart, lungs etc.
- 6. Ans.** Correct Option: [B]
Solution: Bones are not present in the earthworm body.
- 7. Ans.** Correct Option: [C]
Solution: Weaving is a process in which yarn is woven to make fabric. It is done on a loom.
- 8. Ans.** Correct Option: [C]
Solution: Jute fibre is obtained from the stem of the jute plant.
- 9. Ans.** Correct Option: [D]
Solution: Jute is cultivated during the rainy season. It grows best in warm and humid climates.
- 10. Ans.** Correct Option: [A]
Solution: Cardboard is opaque, and hence, we cannot see through it. Thus, we cannot say what is kept inside a cardboard carton.

11. Ans. Correct Option: [B]

Solution: The pencil and bag can be grouped together because they are used in school.

12. Ans. Correct Option: [A]

Solution: Windows are not made of glass.

13. Ans. Correct Option: [C]

Solution: They are bad conductors of heat and electricity.

14. Ans. Correct Option: [A]

Solution: The second hand of a clock moves faster than the hour hand. The second hand completes one round in 60 seconds, whereas the hour hand completes one round in 12 hours.

15. Ans. Correct Option: [C]

Solution: The length of the classroom is 10 m.

The length of the playground is 10 times the length of the classroom.

Hence, the length of the playground is $10 \times 10 \text{ m} = 100 \text{ m}$.

16. Ans. Correct Option: [B]

Solution: Hand span and leg span are units of length which are not the same for all men, as different individuals have different lengths of hands and legs.

17. Ans. Correct Option: [A]

Solution: The motion of a pendulum is regular and repeats after equal intervals of time. Hence, the pendulum of a clock has periodic motion.

18. Ans. Correct Option: [D]

Solution: A mirror does not emit light. It only reflects light emitted from a source.

19. Ans. Correct Option: [B]

Solution: The image formed by a pinhole camera is upside down, i.e. it is inverted in nature.

20. Ans. Correct Option: [C]

Solution: The image formed in a mirror is of the same colour as that of the object. Hence, it forms a coloured image.

SECTION B

21.Ans. Structure of stamen:

A stamen comprises an anther and a stalk, called the filament, to which the anther is attached. Anthers are sac-like structures which contain pollen grains.

22.Ans. Omnivores are animals which eat both plants and animals; for example, human and dog.

23.Ans. Rub a piece of groundnut against a paper without tearing the paper. Then observe the paper. The presence of an oily patch indicates the presence of fats in groundnut.

24.Ans.

(i) Fixed joint

(ii) Hinge joint

25.Ans. Knitting is the process used to prepare the fabric for socks. In knitting, a single yarn is used to make a piece of fabric. Therefore, when a single yarn is pulled out continuously from a torn pair of socks, the fabric gets unravelled.

26.Ans. Jute plants are harvested at the flowering stage. The stems are cut close to the ground and are then tied into bundles and soaked in water for a few days. This method of soaking is called retting. It softens the tissues and permits the fibres to be separated.

27.Ans. Materials required to make an umbrella are

1. Waterproof cloth/plastic sheet
2. Wire
3. Steel rods
4. Thread

28.Ans. Length of the pencil = reading of second end – reading of first end
= 9.2 cm – 2.5 cm
= 6.7 cm

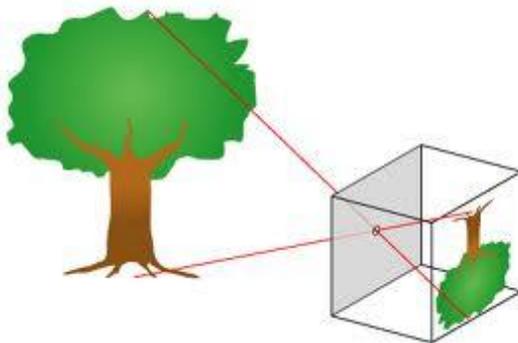
But 1 cm = 10 mm

∴ 6.7 cm = 67 mm

So, the length of the pencil = 67 mm.

29.Ans. When an opaque object is placed in front of a source of light, the light rays cannot pass through it. However, they can bend around the object. So, a dark region in the shape of the object is formed behind the object (the light source being on the other side). This dark region is the shadow of the object.

30.Ans.



SECTION C

31.Ans.

- (i) Honey is produced by honey bees.
- (ii) Bees collect nectar from the flowers of plants and convert it into honey.
- (iii) The bees store honey in beehives.
- (iv) The hives containing honey are called honeycombs.

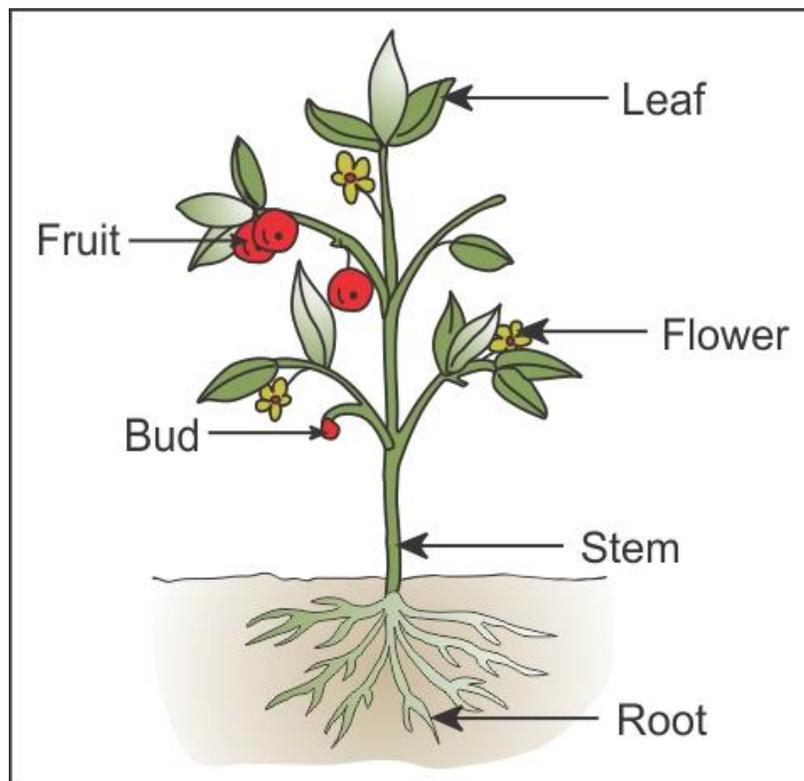
32.Ans.

- (i) A flower develops from a bud. Before this development, the young developing petals are protected by the small leaf-like green structures called sepals. The bud later blooms into a full-grown flower.
- (ii) Water is transported from roots to leaves through the stem.

33.Ans.

- (i) The skull encloses and protects the brain from any injuries or sudden shocks.
- (ii) The discs of cartilage present between the vertebrae of the backbone allow the vertebrae to move slightly and enable the backbone to bend forward and backward.

34.Ans.



35.Ans.

Spinning is the process of making yarn from fibres.

Fibres from a mass of cotton wool are drawn and twisted. This helps to bring the fibres together to form yarn.

Devices used for spinning are spindle (takli) and spinning machine.

36.Ans.

(i) Oxygen gas dissolves in water. The plants and animals which live in water use the oxygen dissolved in water for respiration. Thus, oxygen gas dissolved in water is important for the survival of these animals and plants.

(ii) Carbon dioxide gas also dissolves in water. The plants which live in water use the carbon dioxide dissolved in water for photosynthesis.

(iii) Nitrogen and methane gas do not dissolve in water.

37.. Ans. Soluble in water: Potassium permanganate, Sugar, Alum, Copper sulphate

Insoluble in water: Groundnut oil, Wax, Sand, Petrol

38.Ans.

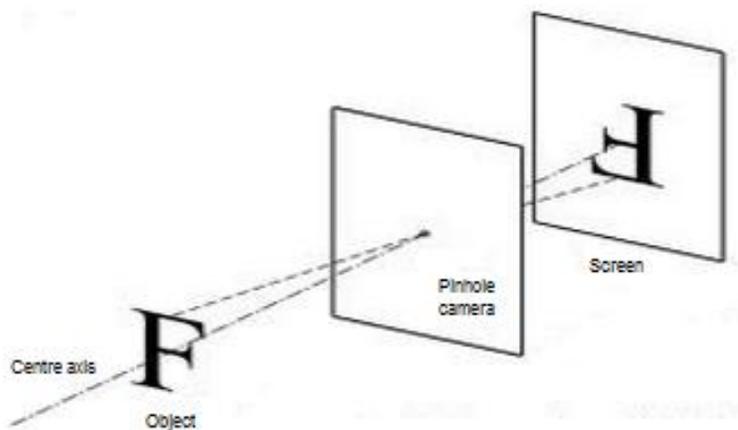
- (i) The car and the people sitting inside it are moving in a circle, and hence, their motion is circular motion. The wheels are in two types of circular motion—one about their centre, and the other about the centre of the roundabout.
- (ii) Measurement is the determination of the dimensions, quantity or capacity of an item.

39.Ans.

- (i) The length of the scale is 15 cm.
The length of the bat is 11 times the length of the scale.
Hence, the length of the bat is $11 \times 15 \text{ cm} = 165 \text{ cm}$.
- (ii) When there is no wind, the raindrop falls down along a straight line, so its motion is rectilinear.
However, when there is wind blowing, the raindrop is carried away while falling downward, so it will have a combination of many motions such as rectilinear, circular, zigzag, rotational etc.

40.Ans.

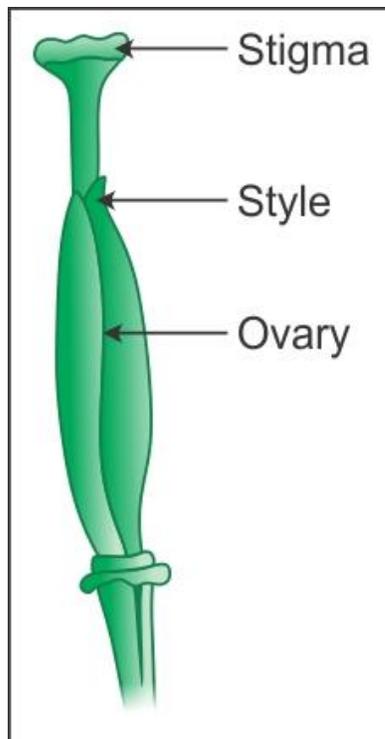
- (i) A pinhole camera is a simple camera with no lens and with a single small aperture.
- (ii) The image of the word F appears as given below.



SECTION D

41.Ans.

(i) Diagram of the parts of a pistil:



(ii) The pistil is the female part of a flower. A pistil is made of three parts—stigma, style and ovary.

The top part of the pistil is called the stigma. The stigma is sticky so that pollen can stick to it. The middle part of the pistil is called the style. It is a tube which connects the stigma to the ovary. The swollen part at the bottom of the pistil is called the ovary. The ovary contains tiny, bead-like structures called ovules.

42.Ans. The body of the earthworm is made of many rings which are joined end to end.

These rings help the earthworm to move forward. The muscles in the body help the earthworm to extend and shorten its body.

At first, the front portion of the body extends and the rear portion of the body remains fixed to the ground.

Then the earthworm fixes the front end and releases its rear end. This helps it to shorten its body and to move forward.

By repeating the same movement by contracting and relaxing the muscles, the earthworm moves ahead.

43.Ans.

- (i) Cotton
- (ii) Ginning
- (iii) Coconut fibre
- (iv) Coconut
- (v) Coir

44.Ans. The characteristics of the image formed by a plane mirror are

- (i) The image formed in a plane mirror is virtual (or unreal). It cannot be obtained on a screen.
- (ii) The image formed in a plane mirror is at the same distance behind the mirror as the object is in front of it.
- (iii) The image in a plane mirror is of the same size as the object. It is neither enlarged nor diminished.
- (iv) The image in a plane mirror is erect. It is the same side up as the object.
- (v) The image in a plane mirror is laterally inverted (sideways reversed) with respect to the object.