

**Goa Board
Class VI Science
Term 1
Sample Paper - 5 Solution**

Time: 3 hrs

Total Marks: 100

SECTION A

1. **Ans.** Correct Option: [C]
Solution: The flowers of Bougainvillea are not eaten as food.
2. **Ans.** Correct Option: [C]
Solution: Milk is a rich source of calcium and phosphorus.
3. **Ans.** Correct Option: [B]
Solution: Marigold plants have a fibrous root system.
4. **Ans.** Correct Option: [D]
Solution: There is a link between the root system and the leaf venation of a plant.
5. **Ans.** Correct Option: [D]
Solution: Ball and socket joints help in moving the bones in all directions.
6. **Ans.** Correct Option: [B]
Solution: Two sets of muscles work in moving the bones.
7. **Ans.** Correct Option: [D]
Solution: Ancient people used the bark and big leaves of trees or animal skins and fur to cover themselves.
8. **Ans.** Correct Option: [D]
Solution: Cotton fibres are lightweight and soft. Hence, these fibres are used for filling mattresses, quilts or pillows.
9. **Ans.** Correct Option: [D]
Solution: Charkha, literally meaning 'wheel', is India's generic term for any spinning wheel.

10. Ans. Correct Option: [B]

Solution: Plastic is a transparent material. Therefore, customers can easily see through plastic containers.

11. Ans. Correct Option: [D]

Solution: The property by which substances dissolve in water is called solubility. Soluble substances dissolve in water.

12. Ans. Correct Option: [B]

Solution: Metals are malleable.

13. Ans. Correct Option: [B]

Solution: The door is opaque; we cannot see through it. Fog is translucent; we can partially see through it.

14. Ans. Correct Option: [B]

Solution: Two times the length of the string = $2 \times 40 \text{ cm} = 80 \text{ cm}$

Half the length of the string = $40/2 = 20 \text{ cm}$

So, the girl's height = $80 \text{ cm} + 20 \text{ cm} = 100 \text{ cm}$

Converting into metres, we get $100 \text{ cm} = 1 \text{ m}$.

15. Ans. Correct Option: [C]

Solution: A child rolling on the grass has two types of motion—rectilinear and rotational.

16. Ans. Correct Option: [D]

Solution: In all the examples, some mode of transport is used.

17. Ans. Correct Option: [D]

Solution: A shadow is formed when light from a source is blocked.

18. Ans. Correct Option: [A]

Solution: Light travels in a straight path. So, it cannot travel through a bent pipe.

19. Ans. Correct Option: [A]

Solution: Because the large object blocks the path of light, the shadow will be in the shape of the large object.

20. Ans. Correct Option: [B]

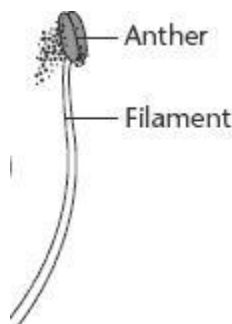
Solution: Smooth and shiny surfaces reflect light better than other surfaces.

SECTION B

- 21. Ans.** Herbs are plants with green and tender stems. They are short in height and do not have many branches. Herbs do not grow more than a metre tall. They also have a short lifespan and may live for only one or two seasons. Examples of herbs are tomato, mustard, radish etc.
- 22. Ans.** In scurvy, the gums tend to bleed and wounds take a longer time to heal.
- 23. Ans.** A hinge joint brings about back and forth movement which can occur in one plane only.
- 24. Ans.** Products produced from milk are butter, cream, curd, paneer and ice-cream.
- 25. Ans.**
- (i) Jute is not used for making clothes or dresses because it is a rough fibre and hence is not comfortable to wear.
 - (ii) In India, jute is mainly grown in West Bengal, Bihar and Assam.
- 26. Ans.** Cotton is usually grown in places with black soil and a warm climate. It is mainly grown in the states of Maharashtra and Gujarat.
- 27. Ans.**
- (a) Wood – Hard
 - (b) Cotton – Soft
 - (c) Stone – Hard
 - (d) Sponge – Soft
- 28. Ans.**
- 1000 metre = 1 km
1 metre = $1/1000$ km
 $3245 \text{ metre} = 3245 \times 1/1000 \text{ km} = 3.245 \text{ km}$
- 29. Ans.** No. The boy is not moving along a circular path, and the distance of the boy from the centre of the park (i.e. the radius) does not remain the same.
- 30. Ans.**
- (i) The bright circular patches of light are the pinhole images of the Sun.
 - (ii) The Sun is the object in this case.

SECTION C**31.Ans.**

- (i) Rose and lily have both stamen and pistil.
- (ii) The stamen is the male reproductive part of a flower.

**32.Ans.** Functions of vitamins:

- (i) They help in protecting our body against diseases.
- (ii) They help to maintain healthy teeth.
- (iii) They are necessary for eyesight.
- (iv) They help in proper digestion.

33.Ans.

- (i) The fixed joint is a type of joint which does not allow any movement.
- (ii) The lower end of the upper arm bone is in the shape of a 'knob', and the upper end of the lower arm bones is in the shape of a 'cup'. The knob of the upper arm bone fits into the cup of the lower arm bones to form a hinge joint at the elbow.

34.Ans.

- (i) The ears and nose have cartilage tissue.
- (ii) Muscles work in pairs. When one of them contracts, the bone is pulled in that direction, while the other muscle of the pair relaxes. To move the bone in the opposite direction, the relaxed muscle contracts to pull the bone towards its original position, while the first relaxes. A muscle can only pull. It cannot push. Thus, two muscles have to work together to move a bone.

35.Ans.

- (a)
 - (i) Weaving: The process of making a fabric by arranging yarns (long threads) in one direction with other yarns at right angles is called weaving.
 - (ii) Knitting: The process of making a fabric by interlocking loops of a single yarn with knitting needles or machines is called knitting.
- (b) Weaving: Fabric for shirt, saree
Knitting: Vest, socks

36.Ans. Materials having lustre: Gold coin, Stainless steel tumbler, Brass door handle, Aluminium sheet
Materials without lustre: Sand, Sheet of paper, Leather sofa, Jute bag

37.Ans.

- (a) Ground glass - It is a translucent material.
- (b) Clear glass - It is a transparent material.
- (c) Wood - It is an opaque material.
- (d) X is a translucent material, we cannot see clearly through it; whereas, Y is a transparent material, we can see clearly through it.

38.Ans.

- (a) Motion of a body along a straight line is called rectilinear motion. For example, the motion of a train on a straight track.
- (b)
 - (i) Circular motion
 - (ii) Periodic motion
 - (iii) Rotational motion
 - (iv) Circular motion

39.Ans.

- (i) No image can be seen in the mirror because there is no light to be reflected by the mirror.
- (ii) We require three things to observe a shadow: (1) a source of light, (2) an opaque object (to obstruct the path of light) and (3) a screen on which the shadow can be seen.

40.Ans. Uses of plane mirrors:

- 1) To view ourselves at home.
- 2) To make periscopes.
- 3) To make a shop (e.g. jewellery shop) look bigger, plane mirrors are fixed on the walls.
- 4) Plane mirrors are used in solar cookers.

SECTION D

41.Ans.

- (i) The process by which green plants use sunlight to make food from carbon dioxide and water is called photosynthesis.
- (ii) It is essential for plants as it is the only process by which plants make their food.
- (iii) Chlorophyll present in green leaves helps in trapping energy from sunlight.

42.Ans.

- (i) A cockroach has two pairs of wings attached to its breast by flight muscles.
- (ii) The cockroach flies in air by moving its wing up and down rapidly by using flight muscles. When the wings of the cockroach move down, they push air downward and backward. The downward push on air lifts the cockroach up into air, and the backward push on air makes it move forward. After the downstroke of wings, the cockroach raises its wings up again and then makes another downstroke. This keeps the cockroach flying.

43.Ans.

- (a) C; because it does not require food, water and air for its survival.
- (b) A and B; because they need food, water and air for their survival.
- (c) B; because it can make its own food by using carbon dioxide, water and energy.
- (d) A; because it cannot make its food by using carbon dioxide, water and energy.
- (e) (i) A: Cow (ii) C: Wooden box

44.Ans.

- (a) The length of an object is measured by using a scale (or ruler) marked in centimetres and millimetres. In order to measure the length of an object, we place the scale (or ruler) along the object in such a way that the zero mark (0) of the scale coincides with the left end of the object. The length of the object is then obtained by reading the scale division coinciding with the right end of the object.
- (b)
 - (i) Accurate
 - (ii) Cubit