

**Goa Board
Class VII Science
Term 1
Sample Paper - 3**

Time: 3 hrs

Total Marks: 100

General Instructions:

1. The question paper consists of 44 questions and is divided into four sections, A, B, C and D.
 2. All questions are compulsory.
 3. Section A comprises question numbers 1 to 20. These are multiple choice questions carrying one mark each. You are to select one most appropriate response out of the four provided options.
 4. Section B comprises question numbers 21 to 30. These are SAQs carrying two marks each.
 5. Section C comprises question numbers 31 to 40. These are SAQs carrying four marks each.
 6. Section D comprises question numbers 41 to 44. These are SAQs carrying five marks each.
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SECTION A

- Q.1** The mode of nutrition in mushroom is (1)
A. Autotrophic nutrition
B. Saprophytic nutrition
C. Parasitic nutrition
D. All of the above
- Q.2** Ruminants are (1)
A. Herbivores
B. Carnivores
C. Omnivores
D. Producers
- Q.3** The thick layer of fat under the skin is (1)
A. Blubber
B. Fatty tissue
C. Bulber
D. Fats

- Q.4** An anemometer is used to measure (1)
A. Air pressure
B. Wind speed
C. Pressure exerted by liquids
D. Difference in air pressure of two places
- Q.5** What is the advantage of sandy soil? (1)
A. It has minerals.
B. It has a high percolation rate.
C. It helps in recharging groundwater.
D. All of the above.
- Q.6** The breathing rate changes with respect to the (1)
A. Sleeping habits
B. Oxygen level in our body
C. Eating habits
D. Water level in our body
- Q.7** The Bakharwal breed of sheep is famous for making (1)
A. Carpets
B. Sweaters
C. Woollen shawls
D. Hosiery
- Q.8** Silk fibres are made of (1)
A. Carbohydrates
B. Fats
C. Minerals
D. Proteins
- Q.9** Woollen yarn is made up of (1)
A. Woollen fibres
B. Sheared skin
C. Burrs
D. Sheep's hair
- Q.10** Which of the following acid is present in 'amla'? (1)
A. Formic acid
B. Acetic acid
C. Ascorbic acid
D. Lactic acid

- Q.11** The nature of salt produced in a neutralisation reaction can be (1)
- A. Acidic
 - B. Basic
 - C. Neutral
 - D. All of the above
- Q.12** Curd tastes sour due to the presence of (1)
- A. Bases
 - B. Acids
 - C. Bacteria
 - D. Milk
- Q.13** Blue litmus will change to red by which of the following? (1)
- A. Grape juice
 - B. Window cleaner
 - C. Soap solution
 - D. Milk of magnesia
- Q.14** Which of the following is not a possible reason for not using water as a thermometric liquid? (1)
- A. Water has a high specific heat capacity.
 - B. Water is transparent.
 - C. Water sticks to glass.
 - D. Water is non-volatile.
- Q.15** Sea breezes are caused by _____. (1)
- A. Conduction
 - B. Convection
 - C. Radiation
 - D. Conduction and convection
- Q.16** What type of heat transfer takes place in a refrigerator? (1)
- A. Conduction only
 - B. Convection only
 - C. Conduction and convection
 - D. Conduction, convection and radiation

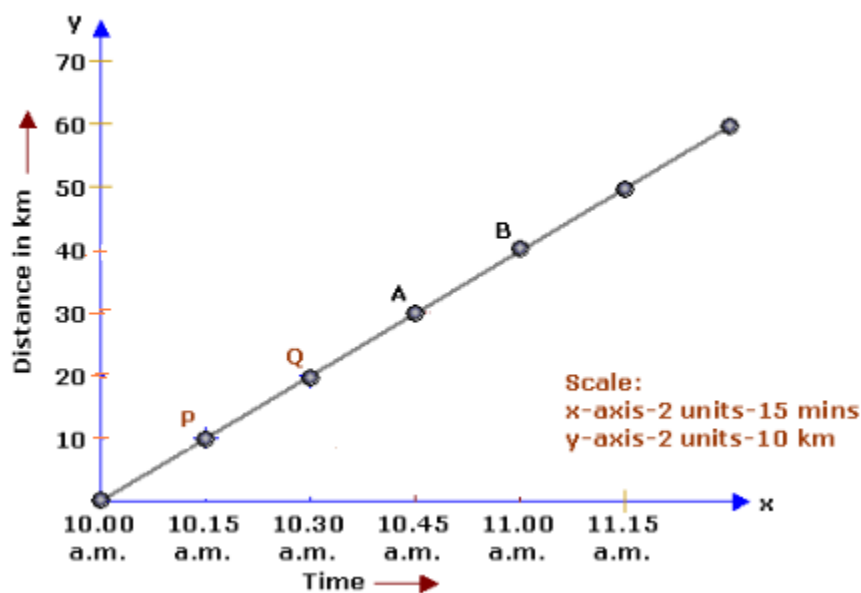
Q.17 It is always better to wash the thermometer with (1)

- A. Acidic solution
- B. Antiseptic solution
- C. Basic solution
- D. Neutral solution

Q.18 The distance–time graph is an example of a _____ graph. (1)

- A. Bar
- B. Pie
- C. Line
- D. None of the above

Q.19 The distance versus time graph of a vehicle is plotted below. What is the distance travelled by a vehicle by 10:45 am? (1)



- A. 10 km
- B. 20 km
- C. 30 km
- D. 40 km

Q.20 The time taken by a pendulum to complete one oscillation is known as (1)

- A. Time interval
- B. Time period
- C. Time gap
- D. Pendulum time

SECTION B

- Q.21** What are the different ways to replenish the soil? (2)
- Q.22** Penguins are birds, still they are not able to fly. Give reasons. (2)
- Q.23** How are water and minerals transported to the leaves? (2)
- Q.24** Give two similarities between aerobic and anaerobic respiration. (2)
- Q.25** Explain the formation of cocoon in silkworms? (2)
- Q.26** Fruits such as orange and lemon are citrus fruits. If few drops of juice obtained from these citrus fruits are added on blue litmus paper, what colour change will be observed? Explain why. (2)
- Q.27** What is the other name of mineral acids? Why is it advised to never taste and touch these acids? (2)
- Q.28** How does heat transfer occur in solids? Explain. (2)
- Q.29** Two boys ran in a race of 10 km. The first boy ran with a constant speed of 2 km/h for the whole race, while the second boy ran at 1 km/h for half of the race and at 5 km/h for the other half. Who won the race? (2)
- Q.30** What are the common units used to measure time? (2)

SECTION C

Q.31 (4)

- (i) Why are the maximum and minimum temperatures higher in cities than in rural areas?
- (ii) Why does the relative humidity change over a day?

Q.32 (4)

- (i) How do an alga and fungus help each other?
- (ii) How do Cuscuta plants obtain food?

Q.33 (4)

- (i) How are a fungus and the roots of a tree living in a symbiotic relationship helpful to each other?
- (ii) How are nutrients replenished in the soil?

Q.34 (4)

- (i) Why do we sneeze?
- (ii) During breathing, what changes occur in the size of the chest cavity?

Q.35 P, Q, R and S are all various types of fibres. The fibres P and Q are obtained from animals, whereas the fibres R and S are obtained from plants. The yarn made of P is used for knitting sweaters, whereas the yarn made of Q is used for weaving saris. The fibre R is used in filling quilts, whereas the yarn made of fibre Q is used in making gunny bags. What are P, Q, R and S? Give reasons for your answers. (4)

Q.36 (4)

- (i) Match the words of Column I with those given in Column II:

Column I	Column II
(i) Scouring	(a) Yields silk fibres
(ii) Mulberry leaves	(b) Wool-yielding animal
(iii) Yak	(c) Food of silkworm
(iv) Cocoon	(d) Reeling
	(e) Cleaning sheared wool

- (ii) Arrange the following steps in the correct order in which they are carried out during the production of woollen yarn from sheep:

Combing, Shearing, Sorting, Scouring

Q.37 How will you show the presence of acid in orange juice? (4)

Q.38 (4)

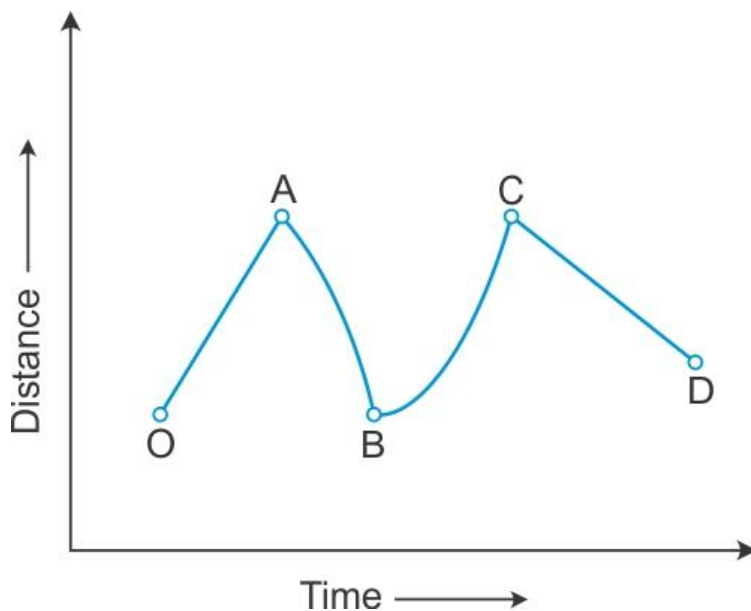
- (i) In what ways can heat transfer from one place to another?
- (ii) There is a lot of concern over the use of mercury in thermometers. Elaborate.

Q.39 (4)

- (i) What is the difference between conduction and convection?
- (ii) It is hotter at the same distance over the top of a fire than it is on the side of it. Why?

Q.40 (4)

- (i) If 1 cm on a time axis shows 1 min, then how many cm will show 1 hour on the axis?
- (ii) Find out the points from the graph where the motion can be uniform from point to point (considering the object is travelling in a straight line).



SECTION D

Q.41 (5)

- (i) What are insectivorous plants?
- (ii) Briefly describe the pitcher plant.
- (iii) How does the food in the pitcher plant get digested?

Q.42 (5)

- (i) Why do frogs use their lungs as well as their skin for breathing?
- (ii) How do plant roots take in oxygen?

Q.43 What is acid rain? How is it caused? What are its after effects? (5)

Q.44 (5)

- (i) Draw the shapes of distance–time graphs for motion in the following cases:
 - 1. A dog running at a constant speed
 - 2. A stationary table
 - 3. A car moving with non-uniform speed
- (ii) Fill in the blanks:
 - 1. A well-known periodic motion is that of a _____.
 - 2. An object moving along a straight line with a constant speed is said to be in _____ motion.