

CBSE Sample Paper

Science Set – B

Class 7

Total marks: 90

1. The question paper comprises of two groups A and B. You are to attempt both the groups.
2. All questions are compulsory.
3. There is no overall choice. However, internal choice has been provided in all the four questions of five marks category. Only one option in such questions is to be attempted.
4. All question of group A and all question of group B are to be attempted separately.
5. Question numbers 1 to 10 in group A are one mark questions. These are to be answered in one word or one sentence.
6. Question numbers 11 to 20 are two marks questions to be answered in about 30 words each.
7. Question numbers 21 to 30 are three marks questions, to be answered in about 50 words each.
8. Question numbers 31 to 34 are five marks question to be answered in about 70 words each.
9. Question numbers 35 to 44 in group B are multiple choice questions, based on practical skills. Each question is a one mark question. You are to choose one most appropriate response out of the four provided to you.

Time allotted: 3 hours**Maximum Marks: 90****Section - A**

- 1) What type of change is photosynthesis?
- 2) What is a periodic motion?
- 3) What is the use of speedometer in a vehicle?
- 4) What are Miniature circuit breakers (MCBs)?
- 5) What do you mean by water table?
- 6) Name 2 diseases caused by micro-organisms present in sewage.
- 7) Can a shiny surface change the direction of the light?
- 8) Give the term if the flower has both male and female parts.
- 9) Why is heart known as the pumping organ of the human body?
- 10) Define Homeostasis.
- 11) If a car is moving with a speed of 5 km/h on a highway, find the distance travelled by the car in 3 hours?
- 12) What do you understand by underground water?
- 13) Explain an open and a closed circuit.
- 14) Explain why untreated human excreta is a health hazard?
- 15) (i) What is galvanisation?
(ii) Why galvanised pipes are used for supplying water?
- 16) What do you mean by the reflection of light ?
- 17) What are the characteristics of the image formed by a concave lens?
- 18) State two advantages of vegetative propagation.

- 19)** Which method of irrigation is employed to minimise the wastage of water?
- 20)** Why do we sweat more in summers than in winters? Name the physical process involved.
- 21)** Explain the different positions of the bob of the simple pendulum while it oscillates.
- 22)** What is an electromagnet?
- 23)** Explain the working of fuse in a circuit.
- 24)** Explain a rainbow.
- 25)** What do you understand by the term 'leaf venetion'? What are the two types of leaf venetion?
- 26)** What is a heartbeat? What is its importance?
- 27)** (a) Why does the uptake of water in plants increase in summers?
(b) During cold nights, water appears on the surface of the leaves. What is that process known as and why does it occur?
- 28)** Water is a very precious resource. What preventive measures can we take to avoid its wastage?
- 29)** How does agriculture increase the water pollution of the surroundings?
- 30)** What happens when an iron nail is dropped in copper sulphate solution?
- 31)** Show the distance-time graph for the motion in the following cases:
- (i) A car moving with a constant speed.
- (ii) A car parked on a side road.
- (iii) A car moving with non-uniform speed.

Or,

A car moving at a speed of 80km/h covers a certain distance in 15 minutes. How much time will it take to cover the same distance if it moves with a speed of 40km/h?

32) When Rita looked at her image in the mirror, she noticed that her right appears to be left and left appears to be right. Why is it so? Also, when she observed the image of her hand in a plane mirror, the distance between her hand and the mirror is 10 cm. If she moves her hand 5 cm backwards, then what will be the distance between her hand and its image?

Or,

What is a mirror? State the characteristics of the image formed by a plane mirror. We know that the rear view mirror of the bus is a plane mirror. A driver is reversing his bus at a speed of 4 ms⁻¹. The driver sees in his rear mirror the image of a car parked behind his bus. What will be the speed at which the image of the car appears to approach the driver?

33) Describe the reproductive parts of a plant with the help of a labeled diagram.

Or,

(a) Name an alga which reproduces by fragmentation. Explain its process of reproduction with help of a diagram.

(b) Define sporogenesis. Give an example.

(c) What is the mechanism of reproduction in hydra and yeast?

34) How does blood reach every part of our body? Support your answer with a suitable diagram.

Or,

(a) Name the two types of vascular tissues in plants?

(b) Describe the process of absorption of water in the plants.

(c) Explain the role of stomata. What controls the opening and closing of stomata?

Section - B

35) The burning of carbon with oxygen is a

(A) physical change.

(B) chemical change.

(C) geographical change.

(D) environmental change.

36) Short circuiting is a consequence,

(A) when the wires come in direct contact with each other.

(B) when current do not flow.

(C) when fuse gets melt.

(D) of loose socket or wires.

37) If a car is moving with a speed of 45 kilometres per hour, it implies that the body

(A) covers a distance of 45 metres in one minute.

(B) covers a distance of 45 kilometres in one hour.

(C) covers a distance of 45 miles in one hour.

(D) is moving with a variable speed of 45 kilometres per hour.

38) The fluid part of blood is called

(A) RBC.

(B) WBC.

(C) haemoglobin.

(D) plasma.

39) When electric current is passed through the filament of the electric bulb, it glows due to

(A) chemical effect of electric current.

(B) heating effect of electric current.

(C) magnetic effect of electric current.

(D) lightening effect of electric current.

40) Seeds of a drumstick and a maple are dispersed by

(A) water.

(B) wind.

(C) birds.

(D) snakes.

41) A kaleidoscope is

(A) an optical toy.

(B) a magnetic toy.

(C) an electrical toy.

(D) an electromagnetic toy.

42) Role of female gamete starts from

(A) dispersal.

(B) pollination.

(C) fertilisation.

(D) germination.

43) The major reason for the depletion of water is

(A) increase in agricultural activities.

(B) increase in rain fall.

(C) increase in population.

(D) decrease in household use.

44) WWTP stands for

(A) Waste Water Treatment Process

(B) Waste Water Treatment Plant

(C) Waste Water Treatment Principle

(D) Waste Water Treatment Plan