

**Class: VII**  
**Subject: SCIENCE**

**Marks: 60**  
**Duration: 2 ½ hrs.**

**General Instructions:**

- All questions are compulsory.
- There is no overall choice. However, internal choice has been given for five marks questions.
- Questions number 1 to 3 in Section A are one mark questions.
- Questions number 4 to 10 in Section A are two mark questions.
- Questions number 11 to 15 in Section A are three mark questions.
- Questions number 16 to 18 in Section A are five mark questions.
- Questions number 19 to 31 in Section B are multiple choice questions.

**SECTION A**

1. Which soil is richest in humus?
2. A car travels 80 km in two hours. Calculate its speed.
3. Give the scientific term for the breaking up of rocks to form soil.
4. Name the breathing organs in
  - a) cockroach    b) frog    c) plant    d) earthworm
5. Draw schematic diagram of circulation of blood
6. Give one function each of W.B.C and Platelets
7. List two differences between 'sexual' and 'asexual' reproduction
8. Draw the different steps in budding of yeast
9. Draw a closed electric circuit using symbols of electric components.
10. Name the kind of mirror used
  - a) as head light of cars
  - b) by dentists
11. Complete this table with words maximum, least, medium

So. No	Characteristics	sandy soil	loamy soil	clayey soil
1	Particle size			
2	Absorption of water			

12. a) A Simple pendulum takes 32 seconds to complete 20 oscillations.  
 What is the time period of pendulum?  
 b) Draw a labelled diagram of simple pendulum.
13. Write 3 ways in which you can save water.
14. List any six products we get from forests.

15. Choose the correct words from the help box related to waste water treatment process and complete the table given below.

**Sludge, clarified, bar screens, aerobic, grit and sand, decreased**

a) Waste water is passed through (1).\_\_\_\_\_ to remove large objects. Then it goes into a (2). \_\_\_\_\_ removal tank where speed of incoming water is (3). \_\_\_\_\_. The water is then allowed to settle in large tank and solids which settle at the bottom are removed by a scraper. This is called (4). \_\_\_\_\_. The skimmer removes floatable solids. The water so obtained is \_\_\_\_\_ water. Air is pumped to help (6).\_\_\_\_\_ bacteria to grow which consume waste.

S.NO	WORD
1.	
2.	
3.	
4.	
5.	
6.	

16. a) Write three differences between aerobic and anaerobic respiration.  
b) Why do we get muscle cramps? How can you get relief from them?

**Or**

- a) What is breathing rate?  
b) Arrange these activities from lowest breathing rate to highest?  
Jumping, reading, running, sleeping  
c) Write two differences between exhaled and inhaled air

17: a) Define heating effect of current.  
b) Write two uses of heating effect  
c) What are electric fuses? How are they useful?

**Or**

- a) Define magnetic effect of current  
b) Who discovered the magnetic effect of electric current?  
c) What are electro magnets? Write two uses of electro magnets?

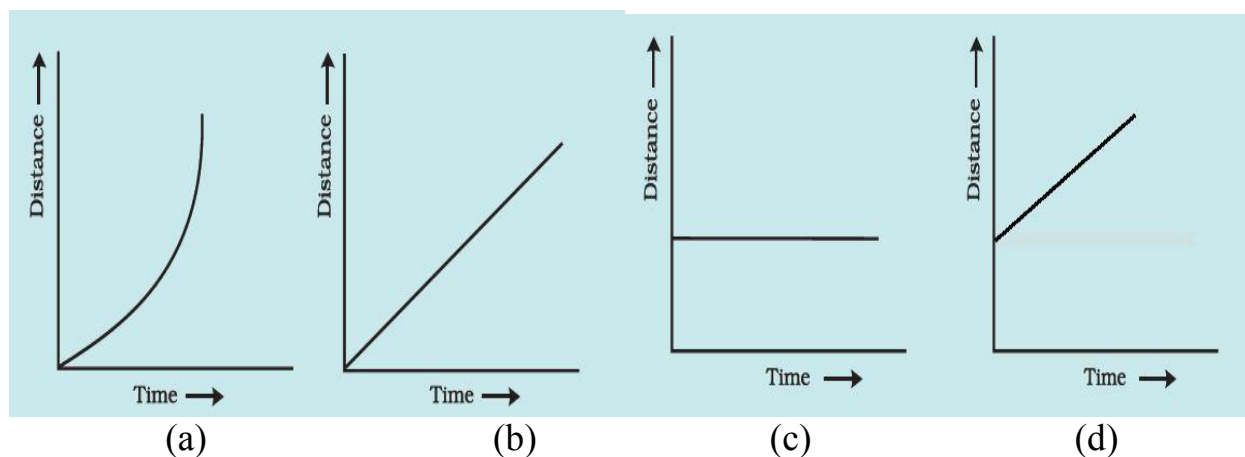
18: a) What do you mean by reflection of light?  
b) What are four characteristics of image formed by a plane mirror?  
c) Write one difference between real and virtual image.

**Or**

- a) What are the two types of mirrors? Draw them.  
b) Which lens is used as a magnifying glass.  
c) Draw what happens when sunlight falls on a prism

## SECTION B

19. Which of the following prevent soil erosion?  
a) Animals    b) plants    c) water    d) wind
20. The mountaineers carry oxygen with them because  
a) At an altitude of more than 5km there is no air  
b) The amount of air available to a person is less than available on ground  
c) The temperature of air is higher than that on the ground  
d) The pressure of air is higher than that on the ground
21. The thinnest blood vessel is  
a) Vein    b) artery    c) capillary    d) platelet
22. A plant that reproduces from its leaf is  
a) Rose    b) Carrot    c) Bryophyllum    d) Papaya
23. An example of a winged seed is  
a) oak    b) drumstick    c) castor    d) Xanthium
24. The SI unit of speed is  
a) km/h;    b) km/min    c) mm/s    d) cm/s
25. Which graph represents a body with no motion?



26. In the symbol of a cell the longer lines represents  
a) positive terminal  
b) negative terminal  
c) both depending on circuit  
d) none of the above

27. Side view mirrors are
- a) concave mirrors
  - b) convex mirrors
  - c) concave or convex
  - d) plane mirrors
28. Which one of the following is not responsible for water shortage
- a) rapid growth of industry      b) increasing population
  - c) heavy rainfall                      d) mismanagement of water resources
29. World water day is on
- a) 22<sup>nd</sup> March      b) 22<sup>nd</sup> May      c) 22 February      d) 22<sup>nd</sup> June
30. Micro-organisms act upon the dead plants to produce
- a) sand    b) mushrooms    c) humus    d) wood
31. Study the following statements about ozone
- I) it is essential for breathing of living organisms
  - II) it is used to disinfect water
  - III) it absorbs ultra violet rays
  - IV) it's proportion in air is about 3%
- Which of these statements are correct
- a) I, II, and III
  - b) II and III
  - c) I and IV
  - d) all the above