

Model Test Paper
Science
Class – VIII

MM.70

I. Choose the correct option and write the correct answer against each question: 1x25=25

Q1. A spring balance is used for measuring

- (a) mass (b) weight (c) pressure (d) speed

Q2. When two forces act in opposite directions, then net force acting is the

- (a) sum of two forces
(b) difference between two forces
(c) both of these
(d) none of these

Q3. State of motion is described by

- (a) Position of rest
(b) Position of motion
(c) Both by the state of rest or motion
(d) None of these

Q4. Which of the following produces least friction?

- (a) Sliding friction (b) Rolling friction (c) Composite friction (d) Static friction

Q5. Whenever the surfaces in contact tend to move or move with respect to each other, the force of friction comes into play

- (a) only if the objects are solid.
(b) only if one of the two objects is liquid.
(c) only if one of the two objects is gaseous.
(d) irrespective of whether the objects are solid, liquid or gaseous.

Q6. Force of friction depends on

- (a) roughness of surface
(b) weight
(c) size
(d) all of these

Q7. Pitch of sound is determined by its

- (a) frequency
(b) speed
(c) amplitude
(d) loudness

Q8. 1 hertz is equal to

- (a) 1 vibration per minute
(b) 10 vibrations per minute
(c) 60 vibrations per minute
(d) 600 vibrations per minute

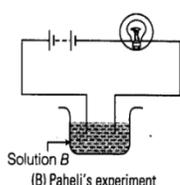
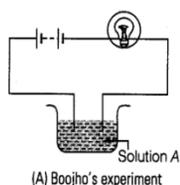
Q9. The number of oscillations per second is called

- (a) Amplitude of oscillation
(b) Pitch of oscillation
(c) Frequency of oscillation
(d) None of the above

Q10. Above _____ dB the sound becomes physically painful

- (a) 60 (b) 40 (c) 120 (d) 80

Q11. Boojho and Paheli performed experiments taking similar bulbs and cells but two different solutions A and B as shown in the figure.



They found that the bulb in the set up A glows more brightly as compared to that of the set up B. You would conclude that

- (a) higher current is flowing through the circuit in set up A
- (b) higher current is flowing through the circuit in set up B
- (c) equal current is flowing through both the circuits
- (d) the current flowing through the circuits in the two set up cannot be compared in this manner

Q12. Boojho's uncle has set up an electroplating factory near his village. He should dispose off, the waste of the factory

- (a) in the nearby river
- (b) in the nearby pond
- (c) in the nearby corn field
- (d) according to the disposal guidelines of the local authority

Q13. The charge acquired by a glass rod when it is rubbed with silk is

- a. Negative b. Positive c. Both d. None

Q14. Sparkers can be seen on electric pole. Which wires become

- a. Loose b. Tight c. Wrinkle d. None

Q15. Where is the lightning rod attached to protect the building from lightning?

- (a) On the top of the building
- (b) On the bottom of the building
- (c) In the middle of the building
- (d) All of these

Q16. What is the angle of incidence of a ray if the reflected ray is at an angle of 90° to the incident ray?

- (a) 60° (b) 45° (c) 90° (d) 180°

Q17. The defect due to which a person is not able to see the distant objects clearly:

- (a) Myopia (b) Hypermetropia (c) Cornea (d) Cataract

Q18. Myopia can be corrected by using a

- (a) concave lens (b) convex lens (c) opaque lens (d) micro lens

Q19. Which planet has the largest number of satellites?

- (a) Jupiter (b) Saturn (c) Mercury (d) Mars

Q20. Which unit is used to measure astronomical distances?

- (a) Leap year (b) Light year (c) Century (d) Sound year

Q21. What term is used for celestial bodies that revolve around the Sun in highly elliptical orbit?

- (a) Comet (b) Meteors (c) Asteroids (d) Planets

Q22. The type of pollution which is likely to affect Taj Mahal in Agra to a greater extent is

- (a) air pollution (b) water pollution (c) soil pollution (d) noise pollution

Q23. Incomplete combustion of fuel such as petrol and diesel gives

- (a) nitrogen oxide (b) sulphur dioxide (c) carbon monoxide (d) carbon dioxide

Q24. In which year Ganga Action Plan was launched?

- (a) 1980 (b) 1984 (c) 1982 (d) 1985

Q25. Which element is present in the exhaust of automobiles?

- (a) Lead (b) Calcium (c) Chromium (d) Magnesium

II. Answer the following questions in short:

2x6=12

Read the following paragraphs carefully and answer the following questions:

26. You can make an object move by pushing on the object. If you push a toy car, it will roll across the floor. The wind can also push things. A sail boat moves when the wind pushes on the sails and makes it move. Water can also push things. Have you ever been in the ocean? The waves can be very strong and push you in the water. Objects can also be set in motion from a pull. You can pull a wagon behind you. If you want the door to open, you have to pull it open. Another example of a pull is when you pull on your socks.

a) Explain how wind helps in moving objects . 2

Q27. Recently on 11 February earthquake tremors were felt in North India from Delhi to Himachal Pradesh range. It was of magnitude 6.1 on scale. 2

a) Name the scale of measuring earthquake.

b) What safety measures one has to follow inside the house in case of tremors of earthquake are felt?

Q28. Iron articles are electroplated to prevent it corrosion. How will you electroplate an iron spoon? Explain the process and name the metal used for the process. 2

Q29. You see a bright star in Northern sky in the early morning. Name that star and how will you locate it. Describe the method. 2

Q30. Ray of light is incident on both mirror and wooden surface. What type of reflection are these? Identify and differentiate. 2

Q31. We see a lot of wear and tear in machine parts. What is the cause of this? Write the ways to prevent this. 2

III. Answer the following questions: 3x6=18

32. The air that we breathe is heavily polluted with toxic gases, chemicals and dust. These consist of the discharge from industrial factories and motor vehicles. The emission of tetraethyl lead and carbon monoxide from exhaust fumes is a major cause for concern too. Outdoor burning of trash and forest fires have also contributed to air pollution. They cause the smarting of the eyes, bouts and coughing and respiratory problems. Acid rain has a damaging effect on water, forest and soil, and is harmful to our health.

a) Which gas is mainly responsible for greenhouse effect? 3

b) What are the main gases that cause acid rain?

c) Where are chlorofluorocarbons used?

33. The water pollution occurs when different particles, chemicals, and other substances cause the water to become unsafe. Sometimes the **pollutants** flow directly into the water from a factory. It can also flow indirectly from rainwater mixed with farm chemicals, construction sites, or other places that release unsafe chemicals. All rainwater eventually seeps into the ground and then flows into rivers, lakes, or streams that may be the source for drinking water.

a) What are two negative effects that water pollution can have on the environment? How can water pollution be reduced?

b) Name some toxic metals whose compounds are present in industrial wastes. 3

34. Everything a person hears is called sound. **Sound** is a vibration or wave traveling through solids, liquids, or gases and can be heard. A sound begins by some type of mechanical movement which can include a person playing an instrument, a door slamming, or thunder in the sky. The molecules of these objects vibrate and in turn cause the surrounding molecules to vibrate, thus causing the sound to travel. 3

a) Write 2 applications of ultrasound.

b) A simple pendulum makes 10 oscillations in 20 s. What is the time period and frequency of its oscillations?

35. Noise pollution is generally defined as regular exposure to elevated sound levels that may lead to adverse effects in humans or other living organisms. According to the World Health Organization, sound levels less than 70 dB are not damaging to living organisms, regardless of how long or consistent the exposure is. Exposure for more than 8 hours to constant noise

beyond 85 dB may be hazardous. If you work for 8 hours daily in close proximity to a busy road or highway, you are very likely exposed to traffic noise pollution around 85 dB.

- a) How is noise pollution harmful? 3
- b) Write 2 preventive measures to control noise pollution. 3
- 36. Write a note on 'The Human Eye'. 3
- 37. Explain electroplating with the help of a neat and labeled diagram. 3
- III. Answer the following questions in detail: 3x5=15
- 38.a) Differentiate meteors from meteorites. 2
- b) How is Orion different from Ursa Major. 3
- 39.a) What is lightning conductor? Explain its working with the help of a labeled diagram. 3
- b) Write 4 precautions to be taken from lightning when you are outside your home. 2
- 40.a) Differentiate static, rolling and sliding friction. 3
- b) How friction is a necessary evil? 2
