

Std.VIII Section : _____

Subject : Science

Marks : 80

Date : _____

Term-I

Name : _____ Roll No. _____

Time : 3 Hrs.

General Instructions

Read the following instructions very carefully and strictly follow them:

- (i) This question paper comprises 39 questions. All questions are compulsory.
- (ii) This question paper is divided into five sections- A, B, C, D and E.
- (iii) Section A- Q. No. 1 to 20 are multiple choice questions. Each question carries 1 mark.
- (iv) Section B- Q. No. 21 to 26 are very short answer type questions. Each question carries 2 marks. Answers to these questions should be in the range of 30 to 50 words.
- (v) Section C- Q. No. 27 to 33 are short answer type questions. Each question carries 3 marks. Answers to these questions should be in the range of 50 to 80 words.
- (vi) Section D- Q. No. 34 to 36 are long answer type questions. Each question carries 5 marks. Answers to these questions should be in the range of 80 to 120 words.
- (vii) Section E-Q. No. 37 to 39 are of 3 source-based/ case-based units of assessment carrying 4 marks each sub-parts.
- (viii) There is no overall choice. However, an internal choice has been provided in some sections. Only one of the alternatives has to be attempted in such questions.

Section A

- Q.1 : The characteristic of sound that depends on the amplitude of vibration is _____ 1M
(a) Speed (b) pitch (c) loudness (d) quality
- Q.2 : Which of the following is not a conductor? 1M
(a) Salt water (b) tap water (c) pure water (d) lime juice
- Q.3: Positively charged ions are called _____. 1M
(a) anions (b) cations (c) cathode (d) anode
- Q.4: Which of the following substance is not a conductor of electricity? 1M
(a) Tap water (b) Salt water (c) Petrol (d) Lime juice
- Q.5: Which substance is not used for electroplating metal articles? 1M
(a) Nickel (b) Chromium (c) Sodium (d) Silver
- Q.6 : The nature of sulphur element is _____. 1M
(a) ductile (b) hard (c) malleable (d) brittle
- Q.7 : Which of the following is not a property of metals? 1M
(a) High melting and boiling points (b) Bad conductors of heat
(c) Can be drawn into wires (d) Solid at room temperature
- Q.8 : The least reactive metal is _____. 1M
(a) magnesium (b) lead (c) silver (d) sodium
- Q.9 : Which of these metals can replace all the other three metals from their salt solutions? 1M
(a) Iron (b) Zinc (c) Copper (d) Silver

- Q.10: The crop which enriches the soil with nitrogen is _____. 1M
(a) apple (b) pea (c) paddy (d) potato
- Q.11: Which of the following is grown by transplantation? 1M
(a) Wheat (b) Rice (c) Peas (d) Potato
- Q.12: It is difficult to walk on ice because _____. 1M
(a) it is too cold (b) friction is less (c) friction is more (d) surface is wet
- Q.13: Friction produces lot of _____. 1M
(a) Light (b) heat (c) both light and heat (d) none of these
- Q.14: Which body shape offers very little resistance to the flow of air (or water) around them? 1M
(a) Circular shape (b) Streamlined shape
(c) Rectangular shape (d) None of these
- Q.15: The one which should be used to reduce friction on a carrom board is _____. 1M
(a) a lubricating oil (b) a dry lubricant
(c) a layer of grease (d) a ball bearing
- Q.16: If the static friction between two surfaces is found to be 30 N, then the rolling friction between these two surfaces should be _____. 1M
(a) 20 N (b) 35 N (c) 40 N (d) 45 N
- Q.17: Assertion : Pure water is a poor conductor of electricity. 1M
Reason: Pure water allows the high flow of an electric current from it.
a) Both A and R are true and R is the correct explanation of the assertion.
b) Both A and R are true but R is not the correct explanation of the assertion,
c) A is true but R is false.
d) A is false but R is true.
- Q.18: Assertion : Gold and silver are the most malleable metals. 1M
Reason: These metals cannot be beaten into sheets.
a) Both A and R are true and R is the correct explanation of the assertion.
b) Both A and R are true but R is not the correct explanation of the assertion,
c) A is true but R is false.
d) A is false but R is true.
- Q.19: Assertion : The process of cutting crops is called weeding. 1M
Reason : Weeds are undesirable plants that grow along with the crops.
a) Both A and R are true and R is the correct explanation of the assertion.
b) Both A and R are true but R is not the correct explanation of the assertion,
c) A is true but R is false.
d) A is false but R is true.
- Q.20: Assertion : When a ball is kicked with a greater intensity, it will go farther and faster. 1M
Reason : The greater the force applied, the greater the resulting effect.
a) Both A and R are true and R is the correct explanation of the assertion.

- b) Both A and R are true but R is not the correct explanation of the assertion,
- c) A is true but R is false.
- d) A is false but R is true.

(Section - B)

Q.21 A: Write two harmful effects of noise pollution. 2M

OR

Q.21 B: How are sound waves produced?

Q.22: How do microbes help in agriculture? 2M

Q.23 A: What are conductors? Give two examples. 2M

OR

Q.23 B: Define the following.

- a. Electrodes
- b. Electrical conductivity

Q.24: Give reasons – 2M
a) Graphite is used as electrodes in dry cells.
b) Metals can be drawn into wires.

Q.25: State two advantages of friction. 2M

Q.26: What is force? Write any two effects of force. 2M

(Section - C)

Q.27: Describe an experiment to show that sound can travel in liquids. 3M

Q.28: What are vaccines? How do they work? 3M

Q.29: With respect to electro refining of copper, answer the following questions. 3M

- a. Which object is used as an anode?
- b. Name the electrolyte used.
- c. What is used as the cathode?

Q.30: What are basic oxides? Give two examples. 3M

Q.31: List the various points to be kept in mind while sowing seeds? 3M

Q.32 A: Explain the disadvantages of friction with examples. 3M

OR

Q.32 B: Give reason for the following

- a. Lubricants reduce friction.
- b. Rough surface has greater friction than smooth surface.

Q.33: Describe any three applications of pressure. 3M

(Section - D)

Q.34 A: Draw the structure of a human ear and explain how the ear receives sound. 5M

OR

Q.34.B: Explain in detail the harmful effects of noise pollution on health.

Q.35 A: Explain in detail, how curd is prepared at home? 5M

OR

Q.35 B: What is food preservation? Explain in detail any four common methods of food preservation.

Q.36 A: Explain electroplating with examples. 5M

OR

Q.36 B: How are metals and non-metals obtained in industries?

(Section – E)

Q.37: Read the following extract carefully and answer the questions given below it.
Sound is produced by vibrating objects. It travels as waves through a medium like air, water, or solids. The speed of sound is different in different media and is fastest in solids. Our ears detect sound waves and send signals to the brain to understand. Sounds below 20Hz are called Infrasonic. The sound frequency that is less than 20Hz or higher than 20,000 Hz cannot be heard by the human ear and is called inaudible sound.

a. What is sound? 1M

b. In which medium sound cannot travel? 1M

c. In which medium sound travels fastest, why? 2M

OR

c. What is the frequency of ultrasonic sound? Name two animals who can hear this frequency.

Q.38: Read the following extract carefully and answer the questions given below it.
Soil provides nutrients to the plants for their growth. Plants absorb a lot of nutrients from the soil. As a result, nutrient content in the soil decreases over a period of time. This loss of nutrients makes the soil lose its fertility. Therefore, to regain the lost nutrient content of the soil, different methods are adopted.

a) What are manures? 1M

b) Give names of any two fertilizers. 1M

c) What is crop rotation? 2M

OR

c) What are the benefits of crop rotation?

Q.39: Read the following extract carefully and answer the questions given below it.
Force and pressure are closely related physical concepts. A force can change the state of motion or shape of an object. When a force is distributed over a surface, it creates pressure. The smaller the area over which a force is applied, the greater the pressure produced. For example, a pointed needle easily pierces fabric because it applies force over a tiny area, creating high pressure. In fluids like air and water, pressure acts in all the directions. This is why dams are built thicker at the bottom, as water pressure increases with depth. The instrument used to measure pressure is called a pressure gauge.

a. Write the formula and unit of pressure. 1M

b. Write two factors on which effect of force depends. 1M

c. Diagrammatically represent that liquids exert equal pressure at the same depth and different pressure at different depth. 2M

OR

c. A force of 200 N is applied to an object of area 2m^2 . Calculate the pressure.
