



INDIAN SCHOOL SOHAR
Term-II Examination (2019-2020)
Class-VIII
Subject –Science

Date-05/03/2020

Time:3 Hrs M.M.:80

Name _____ GR NO- _____ Sec _____

General Instructions:

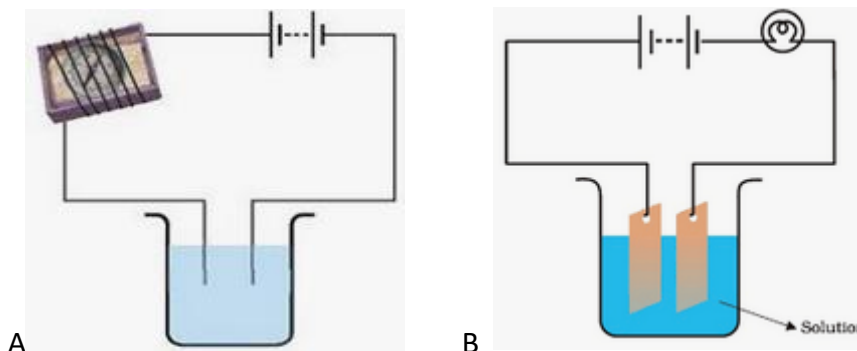
1. The question paper comprises three sections – A, B and C. Attempt all the sections.
2. All questions are compulsory. 3. Internal choice is given in each section.
4. All questions in Section A are one-mark questions comprising MCQ, VSA type and assertion-reason type questions. They are to be answered in one word or in one sentence.
5. All questions in Section B are three-mark, short-answer type questions. These are to be answered in about 50 - 60 words each.
6. All questions in Section C are five-mark, long-answer type questions. These are to be answered in about 80 – 90 words each.
7. This question paper consists of a total of 30 questions

SECTION A

1. A polymer is a set of smaller units called monomers. Name a natural polymer and its unit. (1)

2. Define pressure. (1)

3. Question number 3(a) - (d) are based on the image given below. Study the image carefully, it demonstrates the effects of electric current flowing through a liquid conductor and answer the following questions.



3(a) What is observed in the compass needle? Write the effect demonstrated by image A. (1)

(b) Name the two effects of electric current demonstrated by image B. (1)

(c) What happens in the beaker shown in Image B. (1)

(d) Copper plates are connected to the two terminals of the battery in Image B, name the two terminals. (1)

4. Answer question numbers 4(a) - (d) on the basis of your understanding of the following paragraph and related studied concepts.

An electroscope is made up of a metal detector knob on top which is connected to a pair of metal leaves hanging from the bottom of the connecting rod. When no charge is present the metal leaves hang loosely downward. But, when an object with a charge is brought near an electroscope, one of the two things can happen.

- When the charge is positive, electrons in the metal of the electroscope are attracted to the charge and move upward out of the leaves.
- When the charge is negative, the electrons in the metal of the electroscope repel and move toward the leaves on the bottom.

An electroscope responds to the presence of a charge through the movement of electrons either into or away from, the leaves. It is important to note that the electroscope cannot determine if the charged object is positive or negative – it is only responding to the presence of an electrical charge.

4(a) How can an object acquire electrostatic charge? (1)

(b) How do charges behave when they interact with each other? (1)

(c) What will happen when a charged balloon is brought near an electroscope? (1)

(d) What is an electroscope? (1)

5. Distinguish between contact and non-contact force. (1)

OR

Draw a diagram to show the interlocking of irregularities on two surfaces in contact and define the force that is produced due to this interaction.

For question number **6 and 7**, two statements are given-one labelled **Assertion(A)** and the other Labelled **Reason (R)**. Select the correct answer to these questions from the codes (i),(ii),(iii)and(iv) as given below.

(i)Both A and R is true and R is the correct explanation of the Assertion.

(ii) Both A and R is true and R is not the correct explanation of the Assertion.

(iii)A is true but R is False.

(iv)A is false but R is true

6. Assertion-Petro chemicals are used to prepare synthetic fibres and plastics. (1)
Reason-Petrochemicals are obtained from distillation of coal.

7. Assertion-Flame is produced when a substance undergoes combustion. (1)
Reason-Substances that are volatile produces flame during combustion.

8. Write two properties of metals considering the property of lustre and conductivity. (1)

OR

A-Name a metal that can be found in liquid form in room temperature.

B-Name a metal that can be easily cut with knife.

9. Fuels are classified on the basis of their physical state in nature. Name two gaseous fuels that are considered to be the least polluting energy source. (1)

10. Salt balance in the body is brought about by hormones produced in the _____. (1)

(a) pancreas (b) pituitary (c) thyroid (d) adrenal

11. How can we limit noise pollution in our surroundings? Suggest two measures. (1)

12. Define the term used in the measurement of astronomical distances. (1)

OR

Saturn is the fifth planet from the sun and has two special features that make it unique. State the two features.

13. How can the polestar be located using a constellation? (1)

14. Distinguish between equatorial plane and orbital planes of earth. (1)

SECTION B

15. State three characteristics that make plastics the most sought after commodity. (3)

16. Identify the metals and non-metals in the following compounds: (3)

| Compound | metal | Non-metal |
|---------------------|-------|-----------|
| Zinc sulphate | | |
| Calcium carbonate | | |
| Magnesium hydroxide | | |

17. When a candle burns, it produces a flame with three regions. Fill in the missing information in terms of its visibility and degree of combustion. (3)

| Outermost zone | Middle zone | Inner zone |
|----------------|-------------|-----------------------|
| Hottest | (c) | (e) |
| (a) | luminous | (f) |
| (b) | (d) | Incomplete combustion |

18. The sex of a baby is determined by certain factors present in the gametes. Name the factor and show with the help of a neat diagram how it is determined in the baby. (3)

OR

Puberty is marked by rapid growth related body changes in an individual. Mention three secondary sexual characteristics that appear in boys during puberty.

19. When a force acts on a moving object, it brings about certain changes called effects of force. State any three such changes that can be observed on a moving body. (3)

20. Heena and Ramu rolled a metallic ball over two surfaces-(a) polished floor (b) carpeted floor. Write the observations made by them and give reason. (3)

21. A-Distinguish between audible and inaudible sound. (3)

B-Write the parts that produce sound in the following instruments-

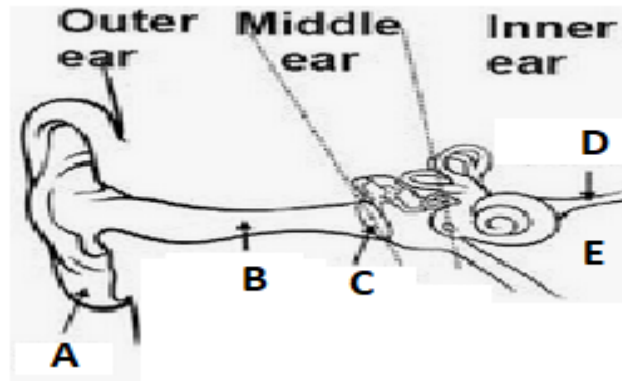
(a)Violin

(b) Drum

(c)Flute

(d)Manjira (cymbal)

22. Human ears are very delicate sound receptors. Label the parts A,B,C,D and E in the figure given below. Point out the part that will get damaged easily when exposed to extremely loud sound. (3)



23. During storms, thunder clap and lightning flash are common phenomena. What should people do to remain safe under such condition? (3)

24. Manu was looking herself in a plane mirror and trying to find the differences in her image. Point out the properties of image formed by a plane mirror. (3)

OR

Two plane mirrors were placed at an angle to each other. Multiple images were formed. Using the data provided calculate the number of images formed by the two mirrors.

| | Angle between the two mirrors | No of images |
|---|-------------------------------|--------------|
| A | 90° | |
| B | 45° | |
| C | 180° | |

SECTION C

25. A-What is fluid friction? (5)

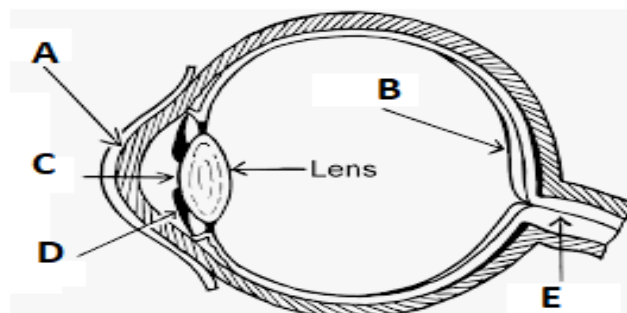
B-State the factors that affect fluid friction and write a method that can be used to minimise it.

26. A-Reflection is the bouncing back of light from a surface. Write the difference in the reflection due to regular and irregular surface and provide suitable diagram to illustrate the phenomenon.

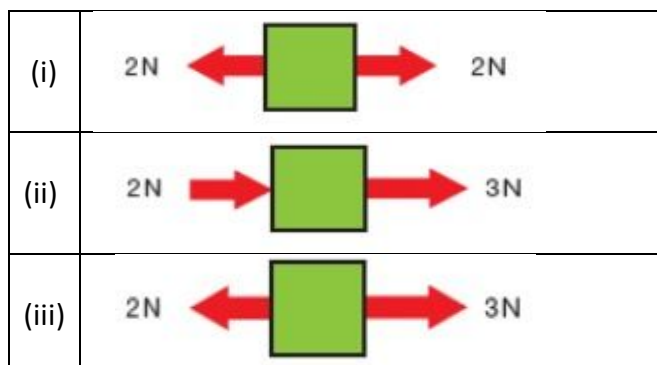
B- Give two examples of applications that demonstrate reflection of light. (5)

OR

Identify A, B, C, D and E in the image given below and state their functions.



27. A-State the conditions under which the Net resultant forces will be equal to zero. (5)
 B-Calculate the resultants forces in the following and also specify the direction in which the object will move.



28. A-What is LED? What is the advantage of using LED over normal bulbs?
 B-Write the changes that take place when current is passed through a conducting solution. (5)
- OR**
- A-Electroplating is a very useful process. What kind of effect electroplating industries can have on the environment?
 B-Write the advantages of using the following in electroplating objects of daily use.
 (a)Chromium (b)Tin (c) Zinc (d)Gold
29. A-What is sound and how is it produced? (5)
 B- Describe the mechanism by which sound is produced in the vocal cords of human.
30. A- List the natural causes of air pollution. (5)
 B-What kind of effect can Pollution have on the following-
 (a) Human (b) Buildings and monuments (c) Ozone layer

OR

Briefly explain about the following-

- A-Greenhouse effect B- Global warming
