Indian School Al Wadi Al Kabir
Final Examination (2024-2025)

Class: VI | Subject: SCIENCE | Max. marks: 80
Date: 11/03/2025 | SET - 1 | Time: 3 hours

General Instructions:

i. All questions are compulsory. Marks are indicated against each section.
ii. The question paper comprises 8 pages and 39 questions in 5 sections A, B, C, D and E.
*iii. Q.1 to Q.16 in **section A** -MCQ carry **ONE** mark each. Write the correct answer along with the option in the answer script.*
*iv. Q.17 to Q.20 in **section A** -Assertion and Reason carry **ONE** mark each.*
*v. Q. 21 to Q.26 in **section B** are Short Answer Type Questions and carry **TWO** marks each.*
*vi. Q.27 TO Q.33 in **section C** are Short Answer Type Questions and carry **THREE** marks each.*
*vii. Q.34 TO Q.36 in **section D** are Long Answer Type Questions and carry **FIVE** marks each.*
*viii. Q.37 TO Q.39 in **section E** are Case study/Paragraph Questions and carry **FOUR** marks each.*
ix. Write the same question number as given in the question paper.
x. Whitener should not be used in the answer script.
xi. Diagrams should be drawn using a pencil.

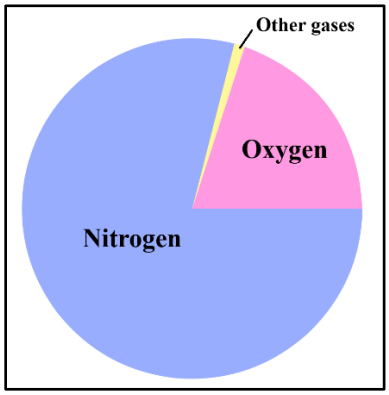
SECTION A (1 X 20 = 20)

1. The natural process in which the topsoil of a field is carried away by physical sources such as wind and water is called -

   (a) Conservation (b) Deforestation

   (c) Weathering (d) Soil erosion

2. The given pie chart shows the composition of air with its main constituents. What percentage of air is composed of nitrogen?



(a) 88% (b) 21%

(c) 1% (d) 78%

3. Refer to the following statements -

   A. To study the behaviour of substances at different temperatures.

   B. To measure boiling point and freezing point during a science experiment.

   C. To measure human body temperature.

   Which of these statements justify the need of laboratory thermometers?

   (a) Only A (b) Only C

   (c) Both A and **C** (d) Both A and B

4. The normal temperature of a healthy human being is close to –

   (a) 32 ^{0}C (b) 37 ^{0}C

   (c) 42 ^{0}C (d) 98.6 °C

5. Which of the following factors can influence a person's body temperature?

   (a) Time of the day (b) Physical activity

   (c) Age (d) All of the above

6. A student requires two magnetic substances for a science project. He could find only one magnet and thus he decided to make another magnet from it. Which of these processes could be followed to create an additional magnet?

   (a) Placing a piece of cardboard above the magnet.

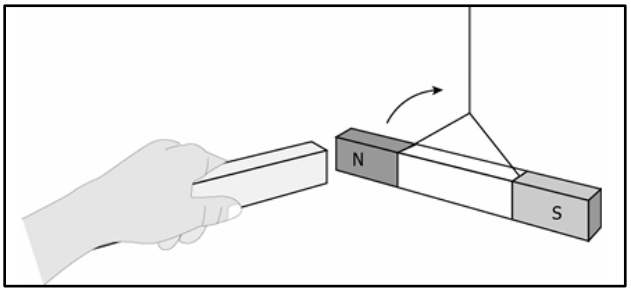
   (b) Placing a nail close to the magnet without touching it.

   (c) Wrapping a piece of plastic around the magnet for a few hours.

   (d) Rubbing a piece of iron nail repeatedly on the magnet.

7. A student performs an activity where a labelled bar magnet is suspended using a thread. He brought another bar magnet where the poles are not marked. As he took it near the north pole of the suspended bar magnet, he noticed that it moved away.

   Which pole of the magnet was held closer to the suspended magnet?



(a) North pole as like poles always repel.

(b) South pole as unlike poles always repel.

(c) North pole as like poles always attract each other.

(d) South pole as unlike poles always attract each other.

8. Air is all around us but does not hinder us from seeing each other. Whereas, if a wooden door comes in between, we cannot see each other. It is because air is……. and the wooden door is……. Choose the most appropriate option:

   (a) Transparent, translucent

   (b) Translucent, transparent

   (c) Opaque, translucent

   (d) Transparent, opaque

9. Some gases are soluble in water. Which of the following gases is soluble in water, and in the dissolved state, is used by the aquatic plants to prepare their food?

   (a) Hydrogen (b) Ozone

   (c) Carbon dioxide (d) Chlorine

10. Aparna accidently dissolves a little amount of sugar in a tumbler half filled with water. Which method would you recommend her to get the sugar back from the solution?

    (a) Decantation (b) Evaporation

    (c) Sedimentation (d) Condensation

11. Why does water evaporate faster from a wide plate compared to small cap?

    (a) The plate has more water.

    (b) The cap is exposed to more sunlight.

    (c) The plate has a larger exposed surface area.

    (d) The cap is warmer.

12. The glasses of spectacles become foggy when we breathe out on glasses, because -

    (a) Water droplets from our mouth get evaporated on the glasses.

    (b) Water from the atmosphere turns into water vapour.

    (c) Water from the atmosphere freezes on the glasses.

    (d) Water vapour from our mouth gets condensed on the glasses.

13. When Reema tried to grow a new rose plant from a stem cutting method, she was not successful. What could be the likely reason?

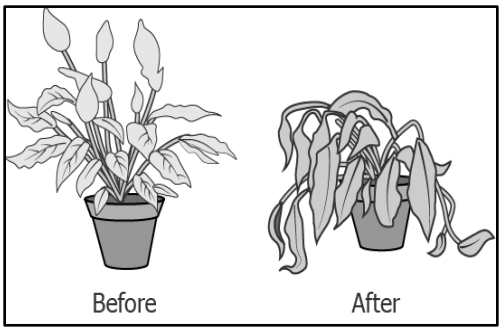
(a) There were no leaves on the cutting.

(b) There were no buds on the cutting.

(c) Rose plants cannot be propagated by cutting.

(d) Cutting needs strong light to grow.

14. The picture shows a plant which was left near a sunny window unattended for few weeks.



What could be concluded based from this observation?

(a) Water is essential for plants to survive.

(b) Plants can absorb water only from the atmosphere.

(c) Plants grow stronger in the absence of water.

(d) Germination of plants does not depend on the availability of water.

15. What is the closest star to Earth after the Sun?

(a) Alpha Centauri (b) Proxima Centauri

(c) Sirius (d) Betelgeuse

16. Which term is used for objects like Pluto that are smaller than planets and lie beyond Neptune?

(a) Satellites (b) Asteroids

(c) Comets (d) Dwarf planets

For the following questions, 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 are true and R is the correct explanation of the assertion.

(ii) Both A and R are true but 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.

17. **Assertion (A):** Diamond is a hard material.

    Reason (R): The material which can be compressed or scratched easily are called hard materials.

18. **Assertion (A):** Dew drops are formed on leaves on a cold morning.

    Reason (R): Water vapour in the surrounding gets condensed and turns into liquid state.

19. **Assertion (A):** Living things produce more of their kind through reproduction.

    Reason (R): It takes place in the same way in all living organisms.

20. **Assertion (A):** The Pole star seems to be still in the north sky in the northern hemisphere.

    Reason (R): The Pole star is located directly above the North Pole.

SECTION B (2 X 6 = 12)

21. Cutting down trees on a large scale impacts the quality of the soil. Give reasons.
22. Distinguish between natural and artificial magnets with **examples**.
23. Explain the properties of liquid water and water vapour.
24. a) What causes the cooling effect in an earthen pot?

    b) Why do clothes tend to dry faster on a windy day?

25. Give a reason:

    i) Mosquito larvae and pupae repeatedly come to the water surface.

    ii) White patches are formed on shirts around the armpits during summer.

26. Draw the following:

    i) Big dipper

    ii) Little dipper

SECTION C (3 X 7 = 21)

27. a) Distinguish between renewable and non-renewable resources with **example**.

    b) What is the importance of rainwater harvesting in the conservation of water?

28. a) Write any **two** precautions to be followed while using laboratory thermometer?

    b) Apeksha visited doctor for a checkup. Doctor told she had a normal body temperature of 98.6 degree. What is the scale of temperature used by doctor? Write the **symbol** of the same.

    c) Convert 80°C to kelvin.

29. a) What are the poles of a magnet?

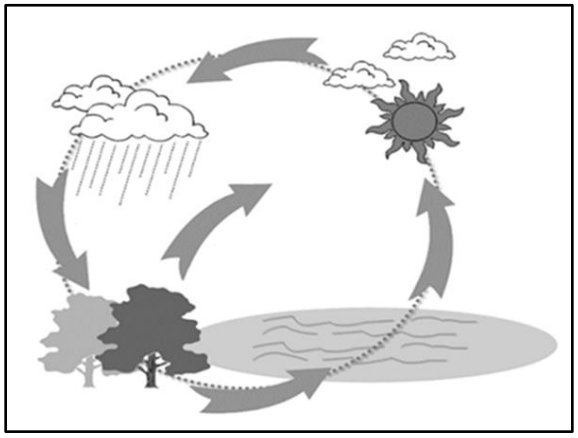
    b) Suggest any **two** arrangements to store a **bar magnet** safely.

30. a) Why do metals lose their shine and appear dull after some time?

    b) State the difference between miscible and immiscible liquids with **examples**.

31. a) What role does temperature play in the process of evaporation?

    b) Observe the given figure and answer the questions below –



    i) What is water cycle?

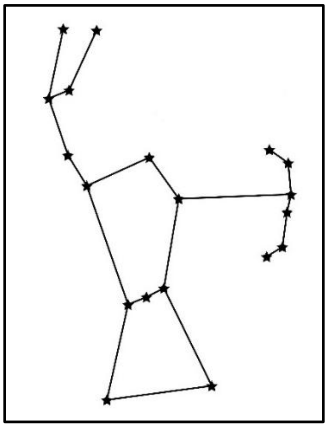
    ii) Why does air containing water vapour rise up in the atmosphere?

32. a) What do you understand by the term-life span of a living being?

    b) List any **two** differences in life cycle of plants and animals?

33. a) What are Craters? How are they created?

    b) What is constellation? **Identify** the following constellation.



SECTION D (5 X 3 = 15)

34. a) Define the term - temperature.

    b) Give reason for the following:

    i) Infrared thermometers were used widely during Covid-19?

    ii) A clinical thermometer has a range between 35 ˚C to 42 ˚C.

    c) A laboratory thermometer has 50 divisions between 0 °C and 100 °C. What does each division of this thermometer measure?

35. a) Why should magnets be kept away from mobiles, computers and compact disks(CDs)?

    b) What happens to the poles of a magnet when we break a magnet into two pieces?

    c) Draw a neat and labelled diagram of a **U-shaped** magnet and **mark its poles**.

36. a) How can the life cycle of a mosquito be disrupted?

    b) Define stimulus. How does the touch-me-not plant respond to stimuli?

    c) A tail is present in a tadpole but it disappears as it grows into a frog. What is the advantage of having a tail in the tadpole stage?

SECTION E (4 X 3 = 12)

37. Petrol, diesel and kerosene are obtained from petroleum. Petroleum along with natural gas and coal are commonly called fossil fuels. They are formed essentially from the remains of microorganisms and plants that got buried deep inside the earth, and were converted to petroleum, natural gas and coal. It takes millions of years for these fuels to form. Natural gas is used for cooking and generating electricity. CNG is compressed natural gas and LPG is liquefied petroleum gas. They are cleaner fuels and do not give smoke and harmful gases when burnt. Fossil fuels are found in limited quantities. Let us do our bit to conserve the fossil fuels by using public transport or carpools to travel, walking or cycling to nearby places, use air conditioners or heaters only when required and use alternative sources of energy like solar energy.

a) How are fossil fuels formed in nature?

b) What are the advantages of using CNG and LPG as fuel?

c) How can we conserve fossil fuels?

38. All things are made up of some materials like paper, wood, cloth, glass, metal, plastic, clay, and so on. The systematic arrangement of things based on certain similarities and differences is called sorting or classification. Classification helps in the systematic study of objects, in identifying and locating things, to study the properties of objects of one kind and also helps to understand similarities and dissimilarities among objects. Any substance that is used to create an object is referred to as material. The materials, through which things can be seen clearly, are called transparent. Glass, water, air etc., are some examples of transparent materials. There are many materials through which you are not able to see at all. These materials are called opaque. Wood, cardboard and metals are examples of opaque materials. The materials through which objects can be seen, but not clearly, are known as translucent. Butter paper and frosted glass are examples of translucent materials. An opaque white paper can be converted into translucent paper by spreading some oil on it.

a) What is the difference between transparent and translucent materials?

b) How can you convert an opaque white paper into a translucent paper?

c) What is classification? What is the need for classifying materials into different groups?

39. To improve our understanding of the Moon, India's first mission to the Moon, Chandrayaan-1, was launched in 2008 and the second mission, Chandrayaan-2, in 2019. The third mission, Chandrayaan-3, was launched in July 2023 and its Vikram lander carrying the Pragyan rover successfully soft-landed on the Moon on August 23, 2023. The primary objective of Chandrayaan-3 mission was to demonstrate a safe and soft landing on Lunar Surface, to demonstrate Rover exploring the Moon's surface, and to conduct in-situ scientific experiments. With this mission, India became the first country in the world to achieve a landing near the little explored Moon's south pole. To mark this success, the Government of India declared August 23 to be celebrated as 'National Space Day' in India.

a) Why is National Space Day celebrated in India?

b) What is the name of Chandrayaan-3 mission's lander and the rover?

c) What were the objectives of Chandrayaan-3?