# O.P.JINDAL SCHOOL, SAVITRI NAGAR

**Half-Yearly Examination (2025 - 26)**

**Class/Sec – VI /___** **F.M. 80**
**Subject – Science** **Time- 3 hours**
**Name - _____** **Roll No. _____**

**General Instructions** – ***Fifteen minutes extra will be given for reading the Question Paper.***

**1. This Question paper comprises of 5 sections A, B, C, D, E. There are 24 questions in all.**
**2. Section A, Q1 comprises of 12 MCQ type questions and each carries 1 mark.**
**3. Section B, Q2 & Q3 are of case-based type questions,carrying 4 marks each & Q4 is Assertion/Reason questions carrying 2 marks..**
**5. Section C, Q5 to Q12 are very short-answer type questions and each carries 2 marks.**
**6. Section D, Q13 to Q21 are short-answer type questions and each carries 3 marks.**
**7. Section E, Q22 to Q24 are long-answer type questions and each carries 5 marks.**

## SECTION – A

**Q1. Choose the correct option.**

**i.** One who follows the scientific method works like a

a. Scientist b. Producer c. Worker d. Follower

**ii..** Science is all about

a. Invention b. Application c. Exploration d. All of these

**iii.** Why did your pen stop working?

a. Ink finished b. Ink dried c. Paper damaged d. Both a and b

**iv.** This helps in the digestion of food.

a. Proteins b. Carbohydrates c. Water d. Minerals

**v.** Which of these are protective nutrients?

a. Fibres b. Vitamins c. Fats d. Carbohydrates

**vi.** Polar bears accumulate a lot of fats under their

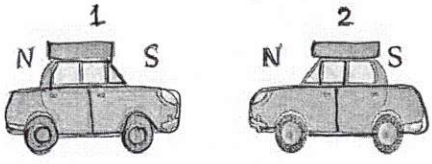
a. Skin b. Eyes c. Hair d. Ears

**vii.** Find the odd one out.

a. Iodine b. Iron c. Proteins d. Calcium

**viii.** Look at the pictures 1 & 2. Find out the correct reaction between them.

a. Attraction b. Repulsion c. Distraction d. No change



**ix.** We should not keep magnets near a

a. Computer b. Keeper c. Iron d. Magnet

**x.** Which of the following is not transparent?

a. Air b. Water c. Glass d. Butter paper

xi. Which of these is not a matter?

a. Sunlight b. Mirror c. Hydrogen d. Kerosene

**xii.** I can easily be compressed. Who am I?

a. Wood b. Pillow c. Book d. Cement wall

## SECTION – B

**Q2. Case-Based (Read the passage below and choose the right answer).**

During a science activity, students were shown pictures of various animals and plants living in different regions - camels in deserts, pine trees in mountains, frogs in ponds, and cactus plants etc. They saw pictures of mushrooms growing near a tree trunk, tall bamboo plants, colourful butterflies, ants moving in a line, and a small frog resting near a pond. The teacher told them that all these organisms are living beings, even though they look and behave differently. Their teacher asked to group the animals according to any pattern. Seema created a scrapbook showing pictures of different animals. She grouped them into those with backbones and those without that are called vertebrates and invertebrates respectively. Her teacher praised her for identifying patterns among living beings and said she was applying scientific classification. Students are taught that the plants and animals living in a particular region have some special features that make them fit to survive there. The shape of a deodar tree, the hump on a camel's back, the thorns in a cactus plant, thick fur on a polar bear are adaptations that enable them to survive in a particular habitat.

**i.** The place where plants and animals survive is called their

a. Habitat b. Group c. Adopt d. Diversity

**ii.** Animals without backbones are called

a. Vertebrates b. Invertebrates c. Patterns d. Regions

**iii.** Which of the following is an adaptation of deodar tree?

a. Thick leaves b. Thin roots c. Green stem d. Conical shape

**iv.** Find the odd one out.

a. Mountain b. Desert c. Adaptation d. Pond

**Q3. Case-Based (Read the passage below and choose the right answer).**

A thing or object is said to be in motion when it changes its position with respect to time. Motion is the activity or process of continually changing position or moving from one position to another. Motion can be classified as linear as a car moving on a road, circular as a moving blades of a fan, rotational as a moving top, oscillatory as a swing and random motion as a bee moving from flower to flower. Certain objects show two types of motion at a same time. For example, wheel of a bicycle shows circular motion as well as rectilinear

motion. A bob of a pendulum has linear and periodic motion. Observe a tailor working on a sewing machine. The sewing machine remains at the same location while its wheel moves with a circular motion. It also has a needle that moves up and down repeatedly and continuously, as long as wheel rotates.

**i.** Select the one that remains at rest when you were making the above observation.

a. Tailor b. Sewing machine c. Wheel d. Both a and b

**ii.** In this observation the periodic motion was observed in

a. Wheel of machine b. Needle of machine c. Body of tailor d. Both a and b

**iii.** Repetitive cycle from the point of release to the other point and back to the initial point is called

a. Rotation b. Oscillation c. Vibration d. Translation

**iv.** What type of motion does a spinning top show?

a. Circular b. Rotational c. Rectilinear d. Periodic

**Q4. In the question given below are two statements labelled as Assertion (A) and Reason (R). In the context of the question which of the following is correct?**

**i.** Assertion (A) – A compass is a magnetic field that is used by sailors to find directions.

Reason (R) – The sailors can find directions by using magnetic compass without magnetic needle in it.

a. Both assertion and reason are correct and reason is correct explanation of the assertion.
b. Both assertion and reason are correct, but the reason is not the correct explanation of assertion.
c. Assertion is correct, but reason is incorrect.
d. Assertion is incorrect, but reason is correct.

**ii.** Assertion (A) – The north pole of a freely suspended magnet points towards the geographical north.

Reason (R) – Using pieces of wood and plastic we can make artificial magnets.

a. Both assertion and reason are correct and reason is correct explanation of the assertion.
b. Both assertion and reason are correct, but the reason is not the correct explanation of assertion.
c. Assertion is correct, but reason is incorrect.
d. Assertion is incorrect, but reason is correct.

## SECTION - C

**Q5.** What do you mean by science and scientific method?

**Q6.** Write any two factors that make earth a unique planet to live in.

**Q7.** Write any one difference between shrub and tree with diagrams.

OR

Describe any four features of fish that help them live in water.

**Q8.** How can you go for the test of fats?

OR

Which nutrient is called body-building nutrient? Why?

**Q9.** Name the nutrient.

**i.** Helps body absorb calcium -

**ii.** Keeps our eyes healthy -

**iii.** Important component of blood -

**iv.** Protects us from the disease Goitre -

**Q10.** Where is magnetism the strongest on a magnet? Justify your answer with an activity.

**Q11.** How can you measure a curve line by using a thread?

**Q12.** Explain two types of linear motions with diagrams.

OR

Differentiate between circular motion and rotational motion with diagrams.

## SECTION - D

**Q13.** Draw & explain water cycle.

**Q14.** Explain any three features of a camel that help it to survive in hot deserts.

OR

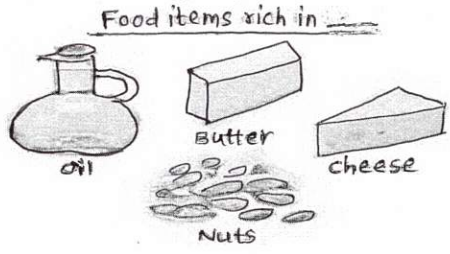
Explain any three adaptations of a polar bear that help it to live in the cold regions.

**Q15.** Rohan's grandma is suffering from constipation. What should she add to her food to get relief from it? Name two food that contains it.

OR

What do you mean by culinary practice? Give two examples of it.

**Q16.** Which nutrient is rich in this food group? Write two uses of it in the body.




**Q17.** If the earth is itself a magnet. Can you guess the poles of earth's magnet by looking at the direction of the magnetic compass? Justify your answer with a diagram.

**Q18.** Name it.

**i.** SI unit of length -

**ii.** 1 mm = 0.1_____

**iii.** Motion of a pendulum -

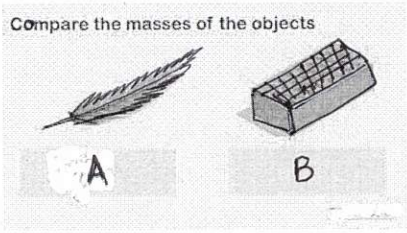
**Q19.** Suppose the distance between your school and home is 2·5 km. Express it in metres and centimetres.

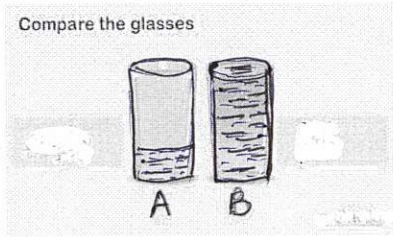
OR

What are the correct ways for measuring a length? (write three)

**Q20. i.** Define mass and volume of an object.

**ii.** Observe the diagrams below and express your answer.




**Q21.** Write the difference among opaque, transparent and translucent with one diagram each.

OR

What properties of containers do you need to put these things separately:-

**i.** Food waste

**ii.** Broken glass

**iii.** Waste clothes

## SECTION - E

**Q22. i.** Draw and write two differences between tap root and fibrous root

**ii.** Group the following animals into two groups based on with backbone and without backbone.

(whale, fish, grasshopper, tortoise, ant, pigeon, cockroach, bat)

OR

**i.** Forests are being cut down to meet various needs. How can this affect our surroundings?(three ways)

**ii.** Draw and write one difference between dicots and monocots.

**Q23.** Name any four magnetic materials and write three uses of magnets.

OR

How can you make your own magnetic compass? Explain with a diagram and write its use.

**Q24. i.** Explain three states of matter with two examples each.

**ii.** Name two solids and liquids each that do not dissolve in water.

OR

**Give reason -**

**i.** The containers, used to store materials in shops or at homes are usually transparent.

**ii.** Tables and chairs can not be made of clothes.

**iii.** Wood and rubber are said non-lustrous materials.

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