



ANGEL'S PUBLIC SCHOOL

HALF YEARLY EXAMINATION

(SAMPLE PAPER)

SESSION 2026 – 27
SUBJECT : SCIENCE
GRADE – VIII

TIME : 03 HRS

M.M:80

General Instructions:-

- Section– A carries 10 multiple choice questions (All are compulsory)of 1 mark each and One word answers including two within the chapter, one Assertion reason based questions of 1mark each.
- Section – B carries 12 short answer type questions of 3 marks each(do any 10)
- Section – C carries 5 long answer type questions of 5 marks each.(Do any 3).
- section – D carries1 case based question carrying 5 marks.
- Section – E carries two diagrams of 5 marks each.

SECTION – A

A. MULTIPLE CHOICE QUESTIONS :-

(10x1=10)

1. What makes an iron nail acts like a magnet in an electromagnet ?
(a) heat (b) light. (c) electric current. (d) sound
2. Which of these is not needed to make an electromagnet ?
(a) iron nail (b) wire. (c) water (d) electric cell
3. Which of the following microorganisms improve soil fertility by fixing nitrogen in the root nodules ?
(a) Amoeba (b) euglena (c) lacto bacillus (d) rhizobium
4. The instrument used to see very tiny microorganisms that cannot be seen with the naked eye is _____.
(a) telescope (b) microscope (c) binoculars. (d) periscope

In the following questions (5 and 6), two statements are given one labelled Assertion and other labelled Reason . Select the correct answers to these questions from the codes a b ,c and d as given below.

- (a) Both A and R are true and R is the correct explanation of the A.
- (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.

5. Assertion A: An electromagnet is stronger when an iron nail is placed inside the coil

Reason R: The iron nail acts as a core that increases the magnetic field of the coil

6.Assertion A: the poles of an electromagnet can be reversed.

Reason R:Changing the direction of the current in the coil reverses the magnetic poles.

7. A ball rolls on the floor and comes to a stop.Which force is mainly responsible for this?

- (a) magnetic force. (b) frictional force (c) gravitational force (d) electrostatic force

8. Liquids exert pressure _____.
(a) only at the bottom of the container (b) at the bottom and on the walls of the container.
(c) only on the walls of the container (d) only when stirred
9. What causes wind to blow from one place to another?
(a) rotation of Earth (b) rainfall
(c) earthquakes (d) differences in air pressure
10. What happened to the pinch of salt that the teacher sprinkled in the water?
(a) The salt floated on top (b) The salt turn into gas .
(c) The salt disappeared completely. (d) The salt change into sugar.

B. VERY SHORT ANSWER TYPE QUESTIONS

(10x1=10)

1. Which part of the dry cell acts as the positive terminal?
2. Give one example of a temporary magnet.
3. Which microorganism is present in the curd?
4. Name one multi cellular organism.
5. What do you mean by LED?
6. State the SI unit of force.
7. Which device is used to measure the weight of an object?
8. When do we observe land breeze and why?
9. How does the air acts when it prevents the charges from mixing?
10. How do high speed winds affect roofs during cyclones?

SECTION – B

C. SHORT ANSWER TYPE QUESTIONS (DO ANY 10)

(10x3=30)

1. Write one difference between protozoa and algae.
2. How do micro organisms acts as nature's cleaners?
3. Why does a nichrome wire heat up more than a copper wire ?
4. Why do objects sink?
5. What are the effects of force?
6. Why do cyclones weaken after reaching land?
7. What is the importance of using chart paper in the air pressure activity?
8. How do particles in solids differ from those in liquids?
9. If you add food colour to still water, it spreads out slowly . What does this tell us about the motion of water particles?
10. Define a thunderstorm.
11. What is the difference between lightning and thunder?
12. Define friction?

SECTION – C

D. LONG ANSWER TYPE QUESTIONS (Do any 3) (3x5=15)

1. Compare a muscle cell, a nerve cell and a red blood cell in terms of their shape and diagrams.
2. Explain how an electromagnet works with the help of an activity.
3. Distinguish between contact forces and non contact forces with two examples each.
4. Write the process of charge build up and lightning formation in detail.
5. Compare the arrangement and movement of particles in solids, liquids and gases .

SECTION – D

E. CASE BASED QUESTIONS. (5x1=5)

Anaya connected A copper wire and an iron nail to a lemon. Join the copper wire of 1 lemon to the iron nail of a next lemon using connecting wires. She joined several Such lemons in a series using copper and iron wires and finally connected an LED to the ends. In this way she has tried to make a battery.

1. What do the lemons act as in this setup?
2. Why is the LED glowing only faintly?
3. How do Anaya increase the brightness of the LED?
4. What does lemon juice acts in the setup?
5. Instead of LED which another device can be used to show whether current is flowing in the circuit or not?

SECTION – E

E. DIAGRAMS. (2x5=10)

(a)

(b)