

O. P. JINDAL SCHOOL, SAVITRI NAGAR

Sample Paper

Annual Examination (2022 – 2023)

Class / Section: VIII

MM:80

Subject: Science

Time: 3 hr

Name _____

Roll No.: _____

(Fifteen Minutes Extra will be given for reading the Question Paper.)

General Instructions:

- The question paper comprises of five sections A, B, C, D, E. There are 32 questions in the question paper. All questions are compulsory.
 - Section A, question no. 1 to 8 are of MCQ type carrying 1 mark each.
 - Section B, question no. 9 and 10 are of case based type questions.
Question no. 11 is reason and assertion type question.
 - Section C, question no. 12 to 20 are very short answer type questions carrying 2 marks each.
 - Section D, question no. 21 to 29 are short answer type questions carrying 3 marks each.
 - Section E, question no. 30 to 32 are long answer type questions carrying 5 marks each.
-

Section – A

Choose the correct option.

- Q1.** Plastid is found in
(a) Plant cell (b) Animal cell (c) Both of these (d) None of these
- Q2.** Sperm is the
(a) Well-developed embryo (b) Developing embryo (c) A zygote (d) Male gamete
- Q3.** The reproductive age in women starts when their:
(a) Height increases (b) Menstruation starts (c) Breast develops (d) None of these
- Q4.** The loudness of sound depends on
(a) frequency (b) amplitude (c) both a and b (d) speed
- Q5.** The passage of electric current through a solution causes _____ effect.
(a) Chemical (b) Magnetic (c) Heating (d) None of these
- Q6.** The bouncing off of light at a surface is called:
(a) reflection (b) refraction (c) dispersion (d) radiation

- Q7.** The stars forming a group that has a recognisable shape is called:
- (a) Asteroid belt (b) Constellation (c) Meteor (d) Meteorite
- Q8.** Which of the following is high reactive?
- (a) Iron (b) Magnesium (c) Sodium (d) Zinc

Section- B

Q9. In the nucleus we can see a smaller spherical body called nucleolus. In addition nucleus contains thread like structures called chromosomes. These carry genes and help in inheritance of characters from the parents to the offsprings. Nucleus acts as control centre of the activities of the cell. The entire content of the living cell is known as protoplasm. It includes cytoplasm and the nucleus.

- (i) The thread like structures in the nucleus are called the _____.
- (a) Plasma membrane (b) Vacuole (c) Chromosomes (d) Cytoplasm
- (ii) Which of the following is the control centre of the cell?
- (a) Cell membrane (b) Cytoplasm (c) Cell wall (d) Nucleus
- (iii) A _____ carry characters from parents to offsprings.
- (a) Tissue (b) Genes (c) Organ system (d) Organism
- (iv) The entire content of the living cell is known as:
- (a) Nucleus (b) Cytoplasm (c) Protoplasm (d) Cell membrane

Q10. Electroscope; It is a device that can be used to test whether an object is carrying charge or not. Electroscope consists of closely placed two metallic (aluminium) foils or strips. When both the strips are charged with similar charges, they repel each other and become wide open.

- (i) The process of transferring charge to the earth is called:
- (a) Tectonic plates (b) Mantle (c) Inner core (d) Outer core
- (ii) Which of the following is not advisable during thunderstorm?
- (a) Carrying an umbrella (b) Stand under a tree (c) Stay near an electric pole (d) All of these
- (iii) A device used to protect buildings from the effect of lightning is called:
- (a) Lightning conductor (b) Electroscope (c) Electric pole (d) Cyclone
- (iv) The inner most layer of the earth is called
- (a) Mantle (b) Crust (c) Inner core (d) Outer core

Q11. Directions: 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? (Answer any four)

(i) **ASSERTION:** In an electroscope, the connecting rod and the leaves are all metals.

REASON: The metal allows the charges to pass through them easily.

- a) Assertion and reason both are correct statement and reason is correct explanation for assertion.
- b) Assertion and reason both are correct statement and reason is not correct explanation for assertion.
- c) Assertion is correct statement but reason is wrong statement.
- d) Assertion is wrong statement but reason is correct statement.

(ii) ASSERTION: While combing hair, charges are not transferred from the hair to the comb due to friction.

REASON : Rubbing certain materials with one another can cause the build-up of electrical charges on the surfaces

- a) Assertion and reason both are correct statement and reason is correct explanation for assertion.
- b) Assertion and reason both are correct statement and reason is not correct explanation for assertion.
- c) Assertion is correct statement but reason is wrong statement.
- d) Assertion is wrong statement but reason is correct statement.

(iii) ASSERTION: An earthquake will not cause uniform damage to all building in an affected area, even if they are built with the same strength and materials.

REASON: The one with its natural frequency close to the frequency of seismic wave is likely to be damaged less.

- a) Assertion and reason both are correct statement and reason is correct explanation for assertion.
- b) Assertion and reason both are correct statement and reason is not correct explanation for assertion.
- c) Assertion is correct statement but reason is wrong statement.
- d) Assertion is wrong statement but reason is correct statement.

(iv) ASSERTION: Lightning strikes are not harmful.

REASON: Lightning conductors protect buildings.

- a) Assertion and reason both are correct statement and reason is correct explanation for assertion.
- b) Assertion and reason both are correct statement and reason is not correct explanation for assertion.
- c) Assertion is correct statement but reason is wrong statement.
- d) Assertion is wrong statement but reason is correct statement.

(v) ASSERTION : Like charges attract each other.

REASON : Unlike charges attract each other.

- a) Assertion and reason both are correct statement and reason is correct explanation for assertion.
- b) Assertion and reason both are correct statement and reason is not correct explanation for assertion.
- c) Assertion is correct statement but reason is wrong statement.
- d) Assertion is wrong statement but reason is correct statement.

Section - C

Q12. Give a brief description of plant cell?

OR

Where are chromosomes found in the cell? State their function.

- Q13.** Write the difference between external and internal fertilisation.
- Q14.** What are sex hormones? Why are they named so?
- Q15.** A pendulum oscillates 30 times in 3 seconds. Find its time period and frequency.
- Q16.** Why do you see lightning earlier and thunder later, though both occur at the same time?

OR

Define the following.

- (i)** Amplitude **(ii)** Pitch

- Q17.** Tap water is a good conductor of electricity. Justify.

OR

Explain the structure of LED.

- Q18.** It is safe for the electrician to carry out electrical repairs outdoors during heavy downpour? Why?
- Q19.** Write a brief note on the planet Venus.
- Q20.** What is lateral inversion? Which mirror shows this? Give one example.

Section- D

- Q21.** Draw and label an animal cell.

OR

Write short notes on the following:

- (i)** Cytoplasm **(ii)** Cell wall

- Q22.** Explain in what way noise pollution is harmful.
- Q23.** Explain budding and binary fission.
- Q24.** What is menstruation? Explain.

OR

Why are endocrine glands also called ductless glands?

- Q25.** Describe the construction of a kaleidoscope.
- Q26.** Explain Cones, rods and blind spot.
- Q27.** Draw the ray diagram to show the image formation by a plane mirror.
- Q28.** What happens when electric current is passed through the copper sulphate solution?
- Q29.** Write any three uses of non-metals.

OR

Explain why:

- (i)** Copper cannot displace zinc from its salt solution?
- (ii)** Sodium and potassium are stored in kerosene?
- (iii)** Utensils are made of metals?

Section- E

Q30. Draw a well labelled diagram of female reproductive organ of human being.

OR

What do you mean by reproduction? Describe various modes of reproduction.

Q31. What are secondary sexual characters?

OR

Explain the term reproductive health. What should we do to maintain reproductive health?

Q32. With an experiment explain the process of electroplating.

OR

When the free ends of the tester are dipped into a chemical solution, the magnetic needle shows deflection. Can you give the reason? Distinguish between conductor and insulator.
