

**O. P. JINDAL SCHOOL, SAVITRI NAGAR****Annual Examination (2022 – 2023)****Class / Section: VIII****Subject: Science**

Name \_\_\_\_\_

**MM:80****Time: 3 hr****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.** Chloroplast is found in  
 (a) Plant cell only                      (b) Animal cell only                      (c) Both of these                      (d) None of these
- Q2.** Foetus is the  
 (a) Well-developed embryo                      (b) Developing embryo                      (c) A zygote                      (d) Male gamete
- Q3.** The period of maturity of reproductive organs is called.  
 (a) Adolescence period                      (b) Menstruation                      (c) Gestation period                      (d) None of these
- Q4.** The pitch of sound depends on  
 (a) Frequency                      (b) Amplitude                      (c) Both a and b                      (d) Speed
- Q5.** An electrolyte is a  
 (a) Metal                      (b) Solution                      (c) Liquid that conducts current                      (d) All of above
- Q6.** The phenomenon of breaking up of white light into its seven constituent colours is called  
 (a) Reflection                      (b) Refraction                      (c) Dispersion                      (d) Radiation
- Q7.** What is the gap between the orbit of mars and Jupiter called?  
 (a) Asteroid belt                      (b) Comets                      (c) Meteor                      (d) Meteorite
- Q8.** The metal which is stored in kerosene:  
 (a) Phosphorus                      (b) Magnesium                      (c) Sodium                      (d) Magnesium

**Section - B**

Q9. Different organs of a plant perform specific/specialised functions. For example, roots help in the absorption of water and minerals. Leaves are responsible for synthesis of food. Each organ is further made up of smaller parts called tissues. A tissue is a group of similar cells performing a specific function. An organ is made up of tissues which in turn, are made up of cells. The boundary of the onion cell is the cell membrane covered by another thick covering called the cell wall. Plant cells need protection against variations in temperature, high wind speed, atmospheric moisture etc. They are exposed to these variations because they cannot move. Cells can be observed in the leaf peel of Tradescantia, Elodea or Rhoeo.

(i) The jelly like substance between the nucleus and the cell membrane is called the \_\_\_\_\_.

(a) Plasma membrane (b) Vacuole (c) Mitochondria (d) Cytoplasm

(ii) Which of the following organelle is NOT a basic component of a cell?

(a) Cell membrane (b) Cytoplasm (c) Cell wall (d) Nucleus

(iii) A \_\_\_\_\_ is a group of cells performing a specific function.

(a) Tissue (b) Organ (c) Organ system (d) Organism

(iv) Which of the following is only present in plant cell?

(a) Nucleus (b) Cytoplasm (c) Plastid (d) Cell membrane

Q10. The earth's rapid trembling or tremor, which lasts for a very short time, is considered an earthquake. The tremors are caused by the movement deep down within the earth's uppermost layer, called the crust. The crust of the earth is made of several parts of landmass. Those are also plate tectonics. Such plates are in continuous movement. Because of impact, as they run through each other, or a plate passes under another. They cause changes within the surface of the earth. These vibrations, which show us on earth's surface as an earthquake. Earthquakes are more likely to occur at the edges of tectonic plates. Many borders or weak areas are referred to as earthquake or fault zones. In India; Kashmir, the western and central Himalayas, the entire northeast, Rann of Kutch, Rajasthan, and Indo-Gangetic Plain are at high risk of earthquake activity. Some areas of South India also fall under the seismic zone and within the danger zone.

(i) Earthquakes are more likely to occur at the edges of

(a) Tectonic plates (b) Mantle (c) Inner core (d) Outer core

(ii) Which of the following is not advisable during earthquake?

(a) Use lift (b) Stand under a tree (c) Stay near an electric pole (d) All of these

(iii) Which of the following is not an earthquake prone place?

(a) Chhatisgarh (b) Rajasthan (c) Kashmir (d) Rann of Kutch

(iv) The top 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:** Electrical charged can be transferred from a charged object to another through a metal conductor.

**REASON:** Metal is a bad conductor of electricity.

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:** An earthquake is a sudden shaking of the earth which lasts for very short time.

**REASON :** Earthquake caused by a disturbance deep inside the earth crust.

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:** The seismic waves are recorded by seismograph instruments.

**REASON:** The tremors produced on the surface of the earth called waves.

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 could destroy life and property.

**REASON:** Lightning conductors can 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 :** 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.

### Section - C

**Q12.** Give a brief description of nucleus?

OR

Name the following:

(i) Selectively allows things to get in and out of the cell.

(ii) Transfer characters from parents to offspring.

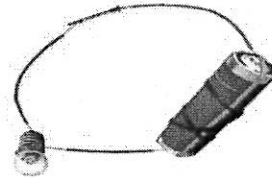
**Q13.** Explain two modes of reproduction with examples.

**Q14.** Explain the terms menarche and menopause.

**Q15.** A string musical instrument was first plucked with a force of smaller magnitude and then with a force of greater magnitude. In which case would the instrument produce a louder sound?

(a) \_\_\_\_\_ is a metal.

(b) Metals are good \_\_\_\_\_ of electricity.



(i) Complete the following sentences on the basis of this fact.  
wire.

Q28. In the following figure you find that the bulb glows when an iron nail is placed between two ends of

Q27. Explain why life is possible on earth.

Q26. Explain the structure of the eye with a neat labelled diagram.

the laws of reflection?

Q25. Differentiate between regular and diffused reflection. Does diffused reflection mean the failure of

(ii) Sex determination in the unborn baby.

(i) Adam's apple.

Write notes on—

OR

Q24. What are sex hormones? State their function.

Q23. Explain the importance of reproduction in organisms.

Q22. Differentiate between musical sound and noise.

(i) Eukaryotes

(ii) Prokaryotes

Write short notes on the following:

OR

Q21. Write any three differences between plant cell and animal cell.

**Section-D**

Q20. List any two characteristics of an image formed in a plane mirror.

Q19. Why does the pole star appear to be stationary from the Earth?

Why?

Q18. It is advisable to cut the electric supply before putting water over a fire caused due to electricity.

What is the purpose of one long and another shorter lead of a LED?

OR

Q17. Distilled water is a poor conductor of electricity. Justify.

(ii) Frequency

(i) Time period

Define the following.

OR

Q16. Suppose a bell is ringing in a vacuum. Will you be able to hear the sound? Why?

(ii) If in the above figure, iron nail is replaced by a wooden stick, will the bulb glow or not? Justify your answer.

Q29. Mention any three physical properties of metals and non-metals.

OR

Explain why:

(i) Why aluminium is used for wrapping of food items?

(ii) Metals are used in ringing bells?

(iii) Handles of the utensils are made of plastic?

**Section- E**

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

OR

What do you mean by metamorphosis? How does metamorphosis take place in frog? Explain with a diagram.

Q31. What changes occur in human at puberty? (Mention any five)

OR

Mention the functions and hormones secreted by the following glands.

(i) Testes

(ii) Thyroid

(iii) Pancreas

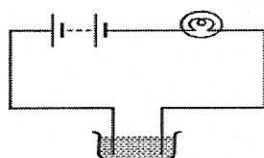
(iv) Ovaries

(v) Adrenal

Q32. What is electroplating? What are its uses? Mention any four uses.

OR

The bulb does not glow in the setup shown in the following figure. List the possible reasons. Explain your answer.



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