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FOR PUNJAB CLASS 8 PREPARATION

PSEB 8th Sample Paper 2027 Science

EXAM	YEAR	TYPE	SUBJECT
Punjab Class 8	2027	Sample Paper	Science

CLASS VIII – SCIENCE (2026-27)

QUESTION PAPER

Maximum Marks: 80. Time: 3 Hour

GENERAL INSTRUCTIONS

(i) The Question Paper comprises of 23 questions. All questions are compulsory.

(ii) The Question Paper is divided into three sections – Unit-I, Unit-II and Unit III.

(iii) Questions No. 1 will be objective (o) type having 20 sub parts. All questions will be Multiple Choice Questions. Each question carries 1 mark.

(iv) Questions No. 2 to 13 are Very Short Answer type Questions. Each question carries 2 marks. Answer to these questions should be in the range of 30 to 50 words. Out of 12 questions 3 questions will have internal choice.

(v) Question No. 14 to 20 are Short Answer type questions. Each questions carries 3 marks. Answer to these questions should in the range of 50 to 80 words. Out of 7 questions 3 questions will have internal choice.

(vi) Questions No. 21 to 23 are Long Answer type questions. Each question carries 5 marks. Answer to these questions should be in the range of 80 to 120 words. Each question will have internal choice.

(vii) There is no overall choice. However, an internal choice has been provided in some sections. Only one of the alternatives has to be attempted in such questions.

SECTION A

20 1 = 20 Marks

1. Choose the correct answer.

(i) A Charge is produced by transfer of

(a) Electrons
(b) Protons
(c) Neutrons
(d) Atoms

(ii) Which out of the following liquid is not good conductor of electricity?
(a) Lemon juice
(b) Distilled water.
(c) Common salt solution
(d) Copper sulphate solution

(iii) Sound can travel in:
(a) Gases only
(b) Liquids only
(c) Solids only
(d) All of the above

(iv) Which measure can be adopted to increase friction:
(a) Using rollers
(b) Oiling or greasing the surface
(c) Treads on tyres
(d) Applying powder on carrom board

(v) Seema does not consume iodized salt. She is likely to develop ……. disease.
(a) Diabetes
(b) Goiter
(c) Cancer
(d) AIDS

(vi) During fertilization, an ovum fuses with sperm to form a single cell named:
(a) Zygote
(b) Male gamete
(c) Female gamete
(d) Embryo

(vii) In humans, sound is produced in:
(a) Brain

(b) Mouth
(c) Spinal Cord
(d) Larynx

(viii) Which out of the following organism possess multiple lens in eyes:
(a) Humans
(b) Cow
(c) Cockroaches
(d) Dog

(ix) Which of the following substance forms an electrolyte solution when dissolved in water?
(a) Sodium chloride (common salt)
(b) Sugar
(c) Glucose
(d) Distilled water

(x) In order to save tigers, the project 'Tiger' was launched in India in:
(a) 1970
(b) 1973
(c) 1980
(d) 1993

(xi) Which part of the eye carries the sensation of sight to the brain?
(a) Retina
(b) Optic nerve
(c) Ciliary muscles
(d) Cornea

(xii) Which of the following organism is a *Hermaphrodite*?
(a) Lizard
(b) Frog
(c) Earthworm
(d) Cockroach

(xiii) Find out the incorrect match for harvest festivals with different states of India:
(a) Bihu – Assam
(b) Pongal – Kerala

(c) Baisakhi – Punjab
(d) Garba – Gujrat

(xiv) In which plant was the first plant virus discovered?
(a) Tea plant
(b) Coffee plant
(c) Tobacco plant
(d) Pea plant

(xv) Which of the following disease can be prevented through vaccination?
(a) Polio
(b) Malaria
(c) Diarrhea
(d) Cholera

(xvi) The product obtained from coal that is mainly used in the manufacturing of steel is:
(a) Coal tar
(b) Coke
(c) Naphthalene
(d) Benzene

(xvii) A student covers a burning candle with an inverted glass jar. After sometime, the flame goes out. This observation shows that a particular gas from the air is necessary for burning. Identify this gas:
(a) Hydrogen
(b) Nitrogen
(c) Oxygen
(d) Carbon dioxide

(xviii) In stagnant water, mosquito eggs hatch into tiny wriggling organisms. These later develop into pupae. Here, the tiny wriggling organisms, refer to:
(a) Adult mosquito
(b) Larva
(c) Embryo
(d) Eggs

(xix) A farmer loosens the soil before sowing seeds mainly to:

(a) Prevent water absorption
(b) Increase soil hardness
(c) Reduce number of microorganisms in the soil
(d) Improve aeration and root growth

(xx) A student finds the names of many threatened animals recorded in a special book maintained for their protection. The book is called:
(a) Green Data Book
(b) Red Data Book
(c) Blue Data Book
(d) Yellow Data Book

SECTION B

12 x 2 = 24 Marks

2. Define contact force and give an example.
3. A cyclist finds that the bicycle tyres slip easily on a muddy road. What can be done to increase the friction between tyres and the road?
4. Name the SI units used to express: (i) Frequency (ii) Time Period

OR

Why are two astronauts standing face-to-face in outer space unable to hear each other's voice when they try to talk to each other?

5. Define reflection of light.
6. Under what conditions combustion can take place?
7. A student tests different liquids using a low-voltage LED tester. The LED does not glow when the tester is dipped in distilled water. The student then adds a few drops of lemon juice to the water and repeats the test.
(a) Predict what will happen to the LED after adding lemon juice.
(b) Explain the reason for your observation.

OR

During a science activity, Riya wants to find out whether all parts of a candle flame burn with the same efficiency. She carefully holds a clean glass slide in the yellow, luminous zone of a candle flame for about 10 seconds using tongs.
(a) What change is likely to be seen on the glass slide?

(b) What does this change tell you about the nature of the luminous zone of the candle flame?

8. Name the major groups of microorganisms.
9. When is Wildlife Week celebrated across India? What is its main objective?

OR

How does large scale deforestation lead to the process of desertification?

10. How many images will be formed when two plane mirrors at placed at an angle of 60 degrees to each other?
11. Name two ancient methods of irrigation.
12. List four organs of human female reproductive system.
13. Name the hormone secreted by pancreas. What is its function?

SECTION C

7 x 3 = 21

14. It is difficult to burn heap of green leaf but dry leaves catch fire easily. Explain.
15. Read the given statement and answer the questions that follow:

"In some societies, women are wrongly blamed for giving birth to a female child."

(a) Explain how the sex of a baby is scientifically determined at the time of fertilization.

(b) Who is genetically responsible for the sex of the child—the mother or the father?

OR

A student observes that caterpillar (larva) eats leaves continuously and looks like a worm, but after a few weeks, it transforms into a winged adult butterfly that feeds on nectar.

(a) Name the process of drastic transformation from a larva to an adult is called?

(b) Sequence the complete life cycle of a butterfly by placing its four distinct stages in the correct order.

16. What are the consequences of deforestation?

17. A pendulum oscillates 50 times in 5 seconds. Find its time period and frequency.

OR

The sound from a mosquito is produced when it vibrates its wings at an average rate of 500 vibrations per second. What is the time period of vibration?

18. An artisan wants to coat cheap iron jewellery with a shiny layer of silver to protect it from rusting and give it an attractive appearance.
(a) Name the chemical process used by the artisan for this coating.
(b) Mention two other practical applications of this process in daily life.

OR

A student uses a magnetic tester (a compass wrapped with wire) to test two liquids. She notices that:
Liquid A causes a large deflection in the compass needle.
Liquid B causes a very small deflection in the compass needle.
(a) Which liquid is a better conductor of electricity?
(b) Why liquid B shows small deflection?
(c) What will happen to the compass needle if the tester is dipped in distilled water instead of Liquid A or B?

19. Write any three situations where friction is harmful for us?

20. A student is standing under a tree during a thunderstorm. Is this a safe place? Give reasons for your answer.

SECTION B

3 x 5 = 15

21. You have four liquids: distilled water, tap water, lemon juice and salt solution.
(a) Which liquid is likely to be the poorest conductor? [1]
(b) What can be added to distilled water to make it conduct electricity better? **[1]**
(c) Why does lemon juice conduct electricity? [1]
(d) Why should electrical appliances never be handled with wet hands? [2]

OR

(a) What are exhaustible natural resources? Give examples. [2]

(b) What do you mean by Carbonisation? [2]

(c) Give full form of CNG and LPG. [1]

22.(a) Write some precautions to minimize damage during an earthquake? [3]

(b) What is pandemic? Name any two pandemics. [2]

OR

"Friction is always harmful and should be completely removed."

(a) Do you agree with the statement? [1]

(b) Give one example where friction is useful. [1]

(c) Give one example where friction causes an unwanted effect. [1]

(d) Why would it be difficult to walk if there were no friction between our feet and the ground? [2]

23.(a) What is formed after the fusion of the male and female gametes? [1]

(b) In humans, where does fertilisation take place? [1]

(c) Why is fertilisation in humans called internal fertilisation? [3]

OR

List the changes that take place at puberty?