



**K.P.C PUBLIC SCHOOL, KHARGHAR**  
**ASSESSMENT IV - 2023-24**

**GRADE: VIII**  
**SUBJECT: SCIENCE**

**MARKS :100**  
**TIME: 3 HRS**

**General Instructions: This question paper comprises five sections A, B, C, D and E.**  
**All questions are compulsory.**

**SECTION – A**

*(This section carries 1 mark each and comprises of :*

*A) Tick the correct answer*

*B) Fill in the blanks*

*C) True or false*

*D) Match the following)*

**A) Tick (✓) the correct answer:**

**(1 x 12=12)**

1. Name the petroleum product used for surfacing of roads

- (a) Butane                                      (b) Anthracite                                      (c) Bitumen                                      (d) Hydrocarbon

2. Out of these, which is able to control fires?

- (a) NH<sub>3</sub>                                      (b) H<sub>2</sub>                                      (c) CO<sub>2</sub>                                      (d) F<sub>2</sub>

3. Four children were asked to arrange forces due to rolling, static and sliding frictions in a decreasing order. Their arrangements are given below. Choose the correct arrangement.

- (a) rolling, static, sliding    (b) rolling, sliding, static    (c) static, sliding, rolling    (d) sliding, static, rolling

4. The waves produced on the earth's surface is called

- (a) seismic wave                                      (b) longitudinal wave                                      (c) Micro wave                                      (d) Radio wave

5. Project Tiger was launched on

- (a) June 2, 1970                                      (b) April 1, 1973                                      (c) August 15, 1969                                      (d) July 1, 1973

6. Adam's apple is

- (a) enlarged larynx                                      (b) mammary glands                                      (c) apple of adam                                      (d) red apple

7. Friction can be increased by

- (a) power                                      (b) smooth surface                                      (c) oil                                      (d) rough surface

8. Which one is not a coal product?

- (a) Coal tar                                      (b) Coal gas                                      (c) Lime                                      (d) coke

9. Suppose surface of the Moon and the Earth are equally rough. A box is pushed on the surface of the Moon, so that it slides there. Mark the correct statement.

- (a) It will be easier to push the box on the Moon than on the Earth.  
(b) It will be more difficult to push the box on the Moon than on the Earth.  
(c) It will be equally easy.  
(d) No prediction is possible.

10. Out of these which one determines the sex of the baby?

- (a) Hormones                                      (b) Chloroplast                                      (c) Chromosomes                                      (d) Pituitary gland

11. Assertion- Endemic species of plants and animals are found easily.

Reason- Indian gaint squirrel and flying squirrel are endemic species.

- (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.

12. Assertion- Match stick does not catch fire on it's own at room temperature.  
Reason- The head of the safety match contains only antimony trisulphide and potassium chlorate.
- Assertion and reason both are correct statement and reason is correct explanation for assertion.
  - Assertion and reason both are correct statement and reason is not correct explanation for assertion.
  - Assertion is correct statement but reason is wrong statement.
  - Assertion is wrong statement but reason is correct statement.

**B] Fill in the blanks:**

**(1 x 6 = 6)**

- A liquid fuel, used in homes is \_\_\_\_\_.
- Migratory birds fly to far away places because of \_\_\_\_\_ changes.
- Sprinkling of powder on the carrom board \_\_\_\_\_ friction.
- Lightning always follows \_\_\_\_\_.
- \_\_\_\_\_ is a hormone secreted from pancreas to hydrolyse the sugar content in the body.
- Pencil lead is made from \_\_\_\_\_.

**C] True or False:**

**(1 x 6 = 6)**

- The fuel can be only liquid in nature.
- The process of transfer of energy from one trophic level to another is called fauna.
- Adolescence period covers 30-35 years of age.
- Friction is independent of area of contact.
- Lightning conductors can protect buildings from the effects of lightning.
- Coal tar is a mixture of various substances.

**D] Match the following:**

**(1 x 6 = 6)**

COLUMN 'A'	COLUMN 'B'
25. Alcohol	a. Girl
26. Eating and being eaten	b. Provide more heat on burning
27. Fluid friction	c. Food chain
28. Waves recorder	d. Seismograph
29. Fuels	e. Inflammable
30. XX chromosomes	f. Drag

**SECTION - B**

*(This section comprises of Short Answer Type Question carrying 2 marks each. )*

**(2x 10 =20)**

- In an experiment 6.5 kg of a fuel was completely burnt. The heat produced was measured to be 32,500 kJ. Calculate the calorific value of the fuel.
- Which are the unsafe places during lightning?
- What are target sites in body?
- What do you understand by fuel efficiency?
- Differentiate between Endangered and extinct species
- Give two instances when friction produces noticeable heat.
- What is ignition temperature?
- Name some wild animals which are protected and preserved in our wildlife sanctuaries.
- Iqbal has to push a lighter box and Seema has to push a similar heavier box on the same floor. Who will have to apply a larger force and why?
- We say fossil fuels will last only for a few hundred years. Comment.

### SECTION – C

(This section comprises of Short Answer Type Question carrying 3 marks each. )

(3 X 6 =18)

41. Explain the fluid friction.
42. What is the reason behind the lightning that we see in the sky during rainy season?

OR

42. Give two example each for a solid, liquid and gaseous fuel along with some important uses.
43. What is the function of wildlife sanctuary? How is it regulated?
44. List conditions under which combustion can take place.
45. Write note on secondary sexual characters.
46. Explain why sliding friction is less than static friction.

### SECTION – D

(This section comprises of Long Answer Type Question carrying 5 marks each. )

(4 x 5 = 20)

47. With the help of an experiment , show that oxygen (air) is necessary for the burning of a candle .
48. Discuss the effects of deforestation on the following:  
a) Wild animals    b) Environment    c) Cities(Urban areas)
49. What is coal? Name the products obtained and their uses when coal is processed in industry.
50. Describe some events where we reduce the friction.

OR

50. What would happen if there were no force of friction? Imagine and describe in your own words.

### SECTION – E

(This section comprises of case study based / data based questions carrying 1 marks each. ) (1x12= 12)

51. Read the following passage and answer the questions:

The species richness of an area is known as biodiversity. Flora and fauna of an ecosystem forms biodiversity. Loss of biodiversity causes a great loss of various species of plant and animal. Various human activities lead to biodiversity loss. So it is need of time to conserve the plants and animals. Our government also took many initiatives in this regard like protection of biosphere reserves etc.

- (i) Biosphere reserves are meant for
  - a. Conservation of species
  - b. Causes extinction of endangered species
  - c .protection from tsunami
  - d.All of these
- (ii) Panchmari is famous for
  - a. Hunting place for animals
  - b. Beautiful gardens
  - c. Biosphere reserve
  - d. Reservoir of coal and petroleum
- (iii) Extinct species are
  - a. On verge on danger
  - b. No individual of these are present on earth
  - c. Protected in zoos
  - d. All are correct
- (iv) Flora and fauna of an ecosystem forms biodiversity. True/ False

52. Observe the diagram given under. The diagram depicts that a steady candle flame is introduced on a clean slide. After some time we observe the black colour in a circular manner on the slide.



- i. Why the black circular ring is formed on the slide?

- ii. The above observation indicates deposition of black spot present in the non-luminous zone. True/False
- iii. Does candle may cause air pollution?
- iv. Which zone of a flame does the goldsmith will blow with a metallic blow-pipe for melting gold and silver?

53. Read the following procedure and answer the questions:

1. Make an inclined plane by supporting one end of the wooden board with books (the inclined plane should be at one end of the table or any smooth surface).
  2. Place the torch cell at the top of inclined plane and let it rolled down and observe how far it goes before coming to rest.
  3. Make a mark on the surface where cell stops. Now spread the cloth over the table or surface (make sure the cloth is wrinkle free), let the cell rolled down the board from the same point and observe the distance it covers over the cloth and mark it.
  5. Now spread sand on table or surface, let the cell roll down again from the same point and mark the distance covered by cell.
- i) In which case is the distance covered the minimum?
  - ii) Why is the distance covered by cell different every time?
  - iii) Does the distance covered depends on the nature of the surface on which it moves ?
  - iv) Friction produced was less when the torch cell rolled down the inclined plane. True/ False

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