

DAV PUBLIC SCHOOLS, ODISHA
PERIODIC ASSESSMENT-I (2023-24)

- Please check that this question paper contains **5** printed pages.
- Check that this question paper contains **17** questions.
- Write down the Serial Number of the question in the left side of the margin before attempting it.
- 15 minutes time has been allotted to read this question paper. The question paper will be distributed 15 minutes prior to the commencement of the examination. The students will read the question paper only and will not write any answer on the answer script during this period.

CLASS-VIII
SCIENCE

Time Allowed: 1hr 30mins

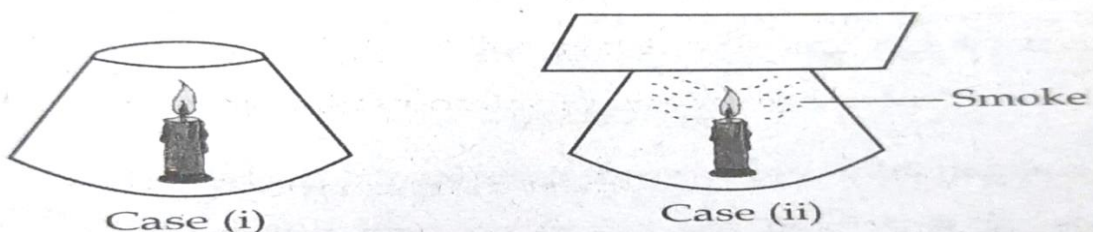
Maximum Marks : 40

General Instructions:

- 1) The question paper comprises five sections- A,B,C,D and E. All questions are compulsory.
- 2) Section A consists of question number 1 to 7,these questions are MCQ's and assertion-Reason questions. They carry one mark each.
- 3) Section B consists of question number 8 to 10. These are short answer questions which carry two marks each.
- 4) Section C consists of question number 11 to 13. These are short answer questions which carry three marks each.
- 5) Section D consists of question number 14 & 15. These are long answer questions which carry five marks each.
- 6) Section E consists of question number 16 & 17. These are case based answer questions which carry four marks each.

SECTION-A

1. Perishable items like mango, litchi, apple, etc. are stored in _____ on a commercial scale. **1**
- Warehousing corporation
 - Food corporation of India
 - Large cold storage
 - None of these
2. You are provided with three watch glasses containing milk, petrol and mustard oil, respectively. Suppose you bring a burning candle near these materials one by one, which material/s catch fire instantly. **1**
- Watch glasses containing milk.
 - watch glasses containing petrol.
 - watch glasses containing mustard oil.
 - watch glasses containing milk, petrol and mustard oil.
3. Observe the following figures and choose in which case the candle will burn continuously. **1**



- Case (i)
 - Case (ii)
 - Both Case (i) & (ii)
 - Neither Case (i) nor (ii).
4. A force of 100 N is applied on an area of 4 m². The pressure being applied on the area is: **1**
- 25 N/m²
 - 50 N/m²
 - 100 N/m²
 - 400 N/m²
5. The stars appear to be moving from east to west. This is due to the **1**
- revolution of Earth around the sun.
 - movement of the stars around the sun.
 - rotation of the earth, on its axis, from east to west.
 - rotation of the earth, on its axis, from west to east.

For question numbers 6 and 7, two statements are given- one labeled as Assertion (A) and the other labeled as Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below: (1+1)

- Both assertion (A) and reason (R) are true, and reason (R) is the correct explanation of the assertion.
- Both assertion (A) and reason(R) are true, but reason (R) is not the correct explanation of the assertion.
- Assertion (A) is true, but reason (R) is false.
- Assertion (A) is false, but reason (R) is true.

6. Assertion (A): Partial combustion of wax vapours takes place in the middle zone of the candle flame.

Reason (R): Middle zone of a flame is its hottest part.

7. Assertion (A): Sowing of seeds with seed drill is better than broadcasting.

Reason (R): In broadcasting seeds are unevenly distributed.

SECTION-B

8. Take a tin can, make two holes at two different points (one at lower end and another at upper end) along a vertical line in the tin. Fill the tin can with water. **2**

- a) From which hole does the water emerge out farther? Give reason for your answer.
- b) Name one more factor on which pressure of the liquid depends.

9. 60 kg of fuel was completely burnt for an experiment. The amount of heat energy was found to be 1,80,000 kJ. Calculate the calorific value of the fuel. **2**

10. a) Observe the given diagram. Name the bacteria present in its root nodules that fixes atmospheric nitrogen. **2**



b) Excess water supply can damage crops. Give reason.

SECTION-C

11. Explain the following: **3**

- a. Porters place a round piece of cloth on their heads when they carry heavy loads.
- b. The nails, pins and spikes have pointed ends.
- c. Mountaineers may suffer from nose bleeding at high altitudes.

12. (a) Differentiate between rapid combustion and spontaneous combustion. (Any one point) **(2+1)**
(b) While shaping Gold into ornaments, which part of the flame directly used by goldsmith.

13. (a) Name the following celestial bodies. **3**

- (i) It is the nearest star to the earth after the sun.
 - (ii) It is a planet that shows its own colourful bands.
- (b)** Give one difference between terrestrial planets and jovian planets.
(c) Mention any two tasks performed by artificial satellites.

SECTION-D

14. (a) Observe the diagram carefully:-

(1+1+1+1/2 +1/2+1/2+1/2)



- (i) Identify X and Y?
- (ii) Name the process.
- (iii) Give one importance of it.

(b) Complete the table:

AGRICULTURAL PRACTICE	IMPLEMENT USED
i) _____	i) Iron or wooden plough
ii) Manual removal of weeds	ii) _____
iii) Manual harvesting of grains	iii) _____
iv) _____	iv) Combine harvester

15. a. Draw the diagram of a candle flame showing the different zones. Label the zones which contains:

(3+1+1)

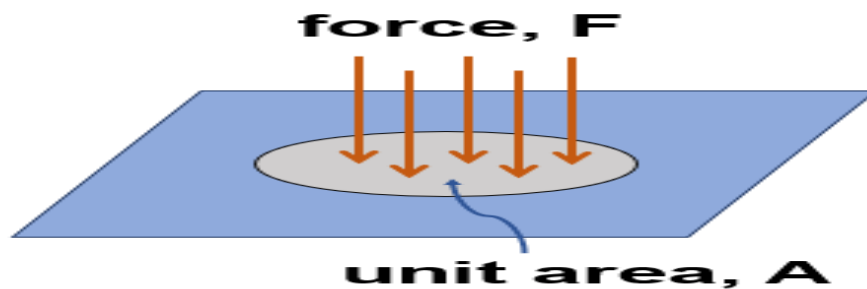
- i. Unburnt wax vapours.
 - ii. Carbon particles.
- b. Define combustible material with an example.
- c. State two characteristics of a good fuel.

SECTION-E

16. Read the following information and answer questions from 16 (i) to 16 (v): (Any four)

(1 x 4)

A force, acting on a surface, exerts a pressure on it and this pressure is dependent on the area over which the force acts perpendicularly. Also there is one special kind of force which in general always tends to slow down a moving object. That force is the frictional force.



- (i) Name the contact force which slows down a moving object.
- (ii) Mention the factor/s on which pressure depends on.
- (iii) Choose an example from the following which is NOT an application of increasing surface area to decrease pressure:
(Nails and pins have pointed ends , Bags have wide straps)
- (iv) Evaluate the pressure exerted by a force on an area, if thrust is doubled keeping the area constant.
- (v) The SI unit of frictional force is _____.

17. Read the following information and answer questions from 17 (i) to 17 (v): (Any four)

(1 x 4)

The plants that are grown and harvested by farmers for profit and subsistence are called crops. Crops can be consumed by animals and humans and are essential to sustain life. The branch of science that deals with the study of cultivating the crops and rearing of cattles are called agriculture. Agriculture or aquaculture are the two modes by which crops can be cultivated. Harvested crops are used as food for humans or fodder for livestock. Examples of crops are- Grains, vegetables, fruits, etc. The soil should be loosened and aerated properly during crop production. Manures and fertilizers need to be added carefully. Too much fertilizer damages the soil while too little makes the crop deficient in nutrients. The crops should be irrigated periodically.

- (i) People of Northern India grow legumes in one season and wheat in next season. Mention the name of this practice.
- (ii) Process of loosening and turning of soil is called_____.
- (iii) Gram is a Rabi crop. Name the season in which it is harvested.
- (iv) Define the term “Crumbs”.
- (v) Write the uses of harvested crops.
