

**DAV PUBLIC SCHOOLS, ODISHA ZONE**  
**PERIODIC ASSESSMENT-1 (2023-24)**  
**CLASS -VIII**  
**SUB - SCIENCE**  
**SAMPLE PAPER - 2**

**TIME: 1 HOUR 30 MINUTES**

**MAXIMUM MARKS: 40**

**General Instructions:**

- **The question paper contains 17 questions**
- **All questions are compulsory.**
- **Question no 1 to 5 are VSA type carry 1 mark each.**
- **Question no 6 & 7 are Assertion and reason based questions carry 1 mark each.**
- **Question no 8 & 9 are passage based questions carry 4 marks each.**
- **Question no 10 to 12 are SA-I type carry 2 marks each.**
- **Question no 13 to 15 are SA-II type carry 3 mark each.**
- **Question no 16 & 17 are LA type carry 5 marks each.**

1. Mention the type of combustion takes place in the burning of cowdung cakes. [1]
2. Name the suffocating gas, responsible for acid rain. [1]
3. Mention the implement used to remove the weeds from the field manually. [1]
4. Name the two natural satellites of Mars. [1]
5. Define emasculation. [1]

For question numbers 6 and 7, two statements are given-one labeled Assertion (A) and the other labeled Reason (R). Select the correct answer from the codes (i), (ii), (iii) and (iv) as given below:

- i) Both A and R are true and R is the correct explanation of A.
  - ii) Both A and R are true but R is not the correct explanation of A.
  - iii) A is true but R is false.
  - iv) A is false but R is true.
6. **Assertion(A)** : Apple falls on the ground due to gravitational force. [1]  
**Reason(R)** : Gravitational force is a contact force.
  7. **Assertion(A)** : Water cannot be used to extinguish fire caused by electric short circuit. [1]  
**Reason(R)** : Electricity can flow through water and give severe electric shock.
  8. Read the following information and answer questions from 8 (i) to 8 (iv): [1 x 4]

In order to provide food for a large population— regular production, proper management and distribution is necessary. When plants of the same kind are cultivated at one place on a large scale, it is called a crop. For example, crop of wheat means that all the plants grown in a field are that of wheat. Cultivation of crops involves several activities undertaken by farmers over a period of time. The process of loosening and turning of the soil is called tilling or ploughing. This is done by using a plough. The ploughed field may have big clumps of soil called crumbs. It is necessary to break these crumbs. Levelling the field is beneficial for sowing as well as for irrigation. Levelling of soil is done with the help of a leveller.

8 i) Soyabean which is generally sown from June to October is an example of \_\_\_\_\_ crops.

- (a) Kharif                      (b) Zaid                      (c) Rabi                      (d) Fiber

8 ii) Harvesting month for Rabi Crop is

- (a) February                      (b) March                      (c) April                      (d) May

8 iii) People of Northern India grow legumes in one season and wheat in next season. This practice is known as-

- a) Field Fallow                      b) Green Manure                      c) Crop Rotation                      d) Lodging

8 iv) The implement used for ploughing –

- (a) Harrow                      (b) Plough                      (c) Trowel                      (d) Harvester

9. Read the following information and answer the questions from 9(i) to 9(iv):

[1 x 4]

We need an external force to move a body from its rest position or to stop a moving body. A force comes into play only when at least two objects interact with each other. A force applied on an object may change its speed or direction of motion or both. Sometimes more than one force can act on an object. The effect of all these forces on the object would be due to the net force acting on it. The effect of a force depends on the surface area over which the force acts. The pressure due to a given force would vary according to the area over which the force is acting.

9.(i) Two forces acting on the same object result no change in state of rest or motion of that object. This is a case of-

- a) Unbalanced force      b) Balanced force      c) Either balanced or unbalanced force.  
d) Both balanced and unbalanced forces.

9.(ii) When a ball is thrown upwards, during its upward motion the speed of the ball gradually decreases. Which force is responsible for its decreased speed?

- a) electric force                      b) magnetic force                      c) muscular force                      d) gravitational force

9.(iii) To move a bicycle along a straight road, we have to keep pedaling it all the time. Identify the force acting between the surfaces of tyre and road.

- a) Frictional force      b) magnetic force      c) muscular force      d) electric force

9.(iv) If a force of 200 N is applied on a surface area of  $10 \text{ m}^2$ , the amount of pressure exerted is-

- a) 10 Pa                      b) 2 Pa                      c) 20 Pa                      d) 100 Pa

10. Flame of a burning candle goes off when we blow over it. Justify the statement.

[2]

11. i) Define irrigation.

[1+1]

ii) Farmers of Rajasthan would prefer drip irrigation method for irrigating the crops.

Justify the statement.

12. State any two advantages of ploughing.

[2]

13. Differentiate between middle most zone & outer most zone of a candle flame. (Any 3 points)

[3]

14. List down the **three** important conditions needed for development and sustenance of life on the planet Earth.

[3]

15. Tomato is a vegetable crop grown in our country.

[1+2]

i) State the method of sowing, the farmers of our country would adopt to grow tomato.

ii) State two advantages of this method.

16. (i) Define calorific value. State its unit. [2+2+1]

(ii) Calorific value of wood is 18000 kJ/kg. How much wood is required to produce 540000 kJ of heat energy.

(iii) Petrol/diesel is being replaced by CNG in automobiles. Give reason.

17. (a) Two objects A and B of masses 10 kg and 50 kg are moving with the same speed. Which one would need a greater force to stop it and why? [2+1+2]

(b) Define hydrostatic pressure.

(c) Rubber suckers are used for installing hooks in a room. Give reasons.

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