



विद्या सर्वार्थ साधिका

ANANDALAYA
PERIODIC TEST - 2
Class: VIII

Subject: Science
Date : 11-09-2025

MM : 50
Time: 2 hours

General Instructions:

1. This question paper consists of 23 questions. All questions are compulsory.
2. Question paper has four sections: Section A, Section B, Section C and Section D.
3. Section A consists of 11 multiple choice questions carrying 1 mark each.
4. Section B consists of 3 short answer questions carrying 2 marks each.
5. Section C consists of 6 short answer type questions carrying 3 marks each.
6. Section D consists of 3 long answer type questions carrying 5 marks each.

SECTION A

1. The resultant of two oppositely directed forces is the _____ of the two forces. (1)
(A) sum (B) difference (C) divisor (D) remainder
2. In _____ instrument, the sound is produced by the vibration of stretched membrane. (1)
(A) wind (B) string (C) percussion (D) all of these
3. The frequency of an oscillating body is 50 Hz. It implies that the body takes _____ to complete one oscillation. (1)
(A) 0.2 second (B) 0.02 second (C) 0.5 second (D) 0.05 second
4. Three constituents of petroleum are _____. (1)
(A) LPG, Explosives, Paints (B) Diesel, LPG, Coal gas
(C) Bitumen, Lubricating oil, Paraffin wax (D) Kerosene, Petrol, Natural gas
5. Which among the following fuel does a rocket use? (1)
(A) Petrol (B) Oxygen (C) Diesel (D) Hydrogen
6. A farmer notices that her crops are wilting despite regular watering and the application of fertilisers. What could be a possible reason? (1)
(A) Excessive pesticide use
(B) Poor soil aeration due to a lack of ploughing
(C) Use of genetically modified seeds
(D) Crop rotation is practised regularly
7. Why is it important to complete the full course of antibiotics even if symptoms improve? (1)
(A) Kills all harmless bacteria as well
(B) Prevents the bacteria from becoming resistant
(C) Develops immunity against antibiotics
(D) Avoids the use of vaccines
8. Excessive use of chemical fertilizers can lead to _____. (1)
(A) Permanent increase in crop yield
(B) Soil degradation and water pollution
(C) Complete removal of pests without pesticides
(D) Rapid germination of seeds

Question numbers 9 to 11 are Assertion (A) and Reason (R) type questions. Select the correct option from the options given below.

(A) Both A and R are true and R is the correct explanation of A.

(B) Both A and R are true but R is NOT the correct explanation of A.

(C) A is true but R is false

(D) A is false and R is also false.

9. A: Force can change the position of an object and cause motion. (1)
R: Force has a magnitude only and it is measured in joule.
10. A: A Teacher of class VIII is telling the class that it is dangerous to burn coal in a closed room. (1)
R: The carbon monoxide gas produced by incomplete combustion can be poisonous.
11. A: Vaccination is an effective way to prevent infectious diseases. (1)
R: Vaccines stimulate the immune system to recognise and destroy pathogens.

SECTION B

12. A camel weighing 5000 N stands on the ground. The area of one foot of the camel is 0.05 m^2 . (2)
How much pressure would it exert on the ground?
13. In an experiment, 4.5 kg of fuel was completely burnt. The heat produced was measured to be 180,000 kJ. Calculate the calorific value of the fuel. (2)
14. **Akash, studying in class VIII, went for a walk in his village fields and saw a farmer spraying weedicides to remove weeds. He noticed that the farmer had not covered his mouth and nose. Akash explained the harmful effects of weedicides and advised him to cover his mouth and nose with cloth.** (2)
(a) What are the values shown by Akash? (Any two).
(b) We wash vegetables thoroughly with water before using them. Why do we do so?

SECTION C

15. Explain why: (3)
(a) Dams are made broader at the base than at the top.
(b) Mountaineers often suffer nosebleeds at high altitudes.
(c) An inflated balloon bursts more easily with a nail than with a finger.
16. (a) What causes friction between two surfaces in relative motion? Explain. (3)
(b) Name the following:
(i) A non-sticky material used to reduce friction.
(ii) The device used to measure the magnitude of friction.
(iii) Another name given to friction exerted by a fluid.
(iv) The friction that cannot be less than sliding friction.
17. If coal and petroleum are both formed from dead organisms, why is petroleum considered more versatile than coal? (any 6 points) (3)
18. Why is ignition temperature important for a substance? Give one example where low ignition temperature can be dangerous. (3)
19. (a) Why are earthworms known as farmer's friend? (3)
(b) If a farmer never leaves her field fallow, will she always get a good crop? Explain.
(c) Mention any two natural methods to replenish soil nutrients.

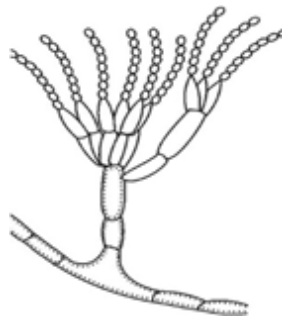
20. (a) Identify the below given organisms A, B, C and D and write their names: (3)



(A)



(B)



(C)

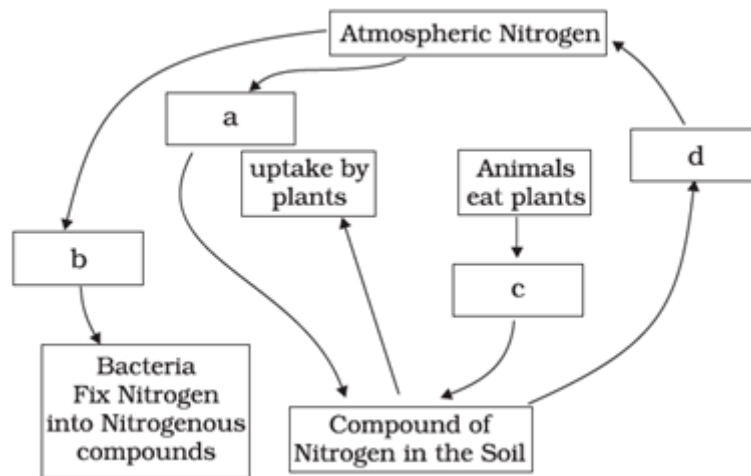


(D)

- (b) Why are viruses considered to be on the borderline between living organisms and non-living things?

SECTION D

21. (a) In which medium sound travels fastest and why? (5)
(b) Which property of sound wave is related to its (a) frequency and (b) amplitude? Write their SI units.
(c) Differentiate the following: (i) Music and Noise and (ii) Audible and inaudible sounds.
22. (a) Draw a neat labelled diagram of a candle flame. Explain the characteristics of each zone of the flame. (5)
(b) Explain the conditions necessary for combustion.
23. (i) Complete the nitrogen cycle given below by filling in the blanks a, b, c and d. (5)



- (ii) Name a bacterial and a viral disease caused in human.
(iii) Why are food items like pickles and jams preserved by adding salt or sugar? Name another method adopted at your homes to preserve food.