



विद्या सर्वार्थ साधिका

ANANDALAYA
PERIODIC TEST -1
Class: VIII

Subject: Science
Date : 14-07-2025

MM : 40
Time: 1 Hr. 30 min.

General Instructions:

1. There are 21 questions in this question paper. All questions are compulsory.
2. Q. No. 1 to 12 are objective type questions and carry 1 mark each.
3. Q. No. 13 to 15 are short answer type questions and carry 2 marks each.
4. Q. No. 16 to 19 are also short answer type questions and carry 3 marks each.
5. Q. No. 20 and 21 are long answer questions and carry 5 marks each.

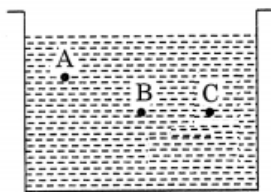
1. Three forces 3N, 5N and 7N are acting simultaneously on an object. The 3N and 7N are acting in the west direction and 5 N is acting in the east direction. What is the magnitude and direction of the net force acting on the object? (1)

(A) 15 N towards west (B) 15 N towards east
(C) 5 N towards west (D) 5 N towards east

2. Out of the following, which one is a contact force? (1)

(A) Gravitational force (B) Magnetic force
(C) Frictional force (D) Electrostatic force

3. The following diagram shows three points A, B and C inside a liquid. P_A , P_B and P_C are pressure at A, B and C respectively. Which one of the options given below is true? (1)



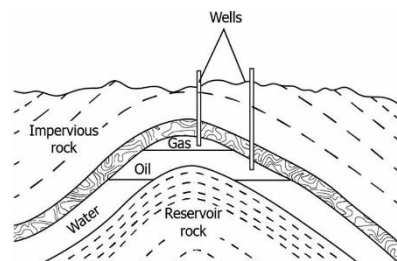
(A) $P_A < P_B = P_C$ (B) $P_A > P_B = P_C$ (C) $P_A = P_B = P_C$ (D) $P_A < P_B < P_C$

4. Which one of the following statements is incorrect? (1)

(A) Bitumen is used for road surfacing. (B) CNG is more polluting than petrol
(C) Paraffin wax is used in candles. (D) Lubricating oil is obtained from petroleum.

5. The image depicts petroleum and natural gas deposits. The oil layer is found between the natural gas and water because _____. (1)

(A) reservoir rocks allow only water to pass through it
(B) different rock layers separate the three substances
(C) oil releases natural gas that forms a new layer over oil
(D) gas and oil are lighter than water and the three substances do not mix



6. Electricity is produced using many natural resources. Which inexhaustible resource should be used to produce electricity? (1)

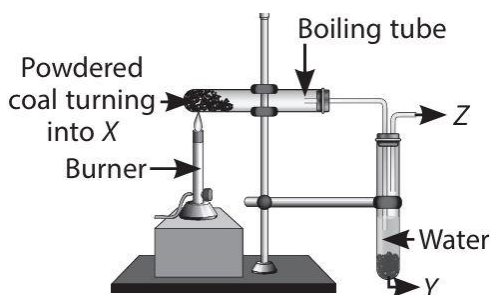
(A) Coal (B) Natural gas (C) Coke (D) Water

7. Air is a natural resource and cannot be exhausted by human activities. It is known as an inexhaustible natural resource. Which of the following is another inexhaustible natural resource? (1)
 (A) coal (B) sun-light (C) petroleum (D) minerals
8. What could be the main reason for crop failure if seeds are sown without ploughing the field? (1)
 (A) Over-watering of soil (B) Lack of proper air and nutrients in the soil
 (C) Excess light reaching the roots (D) All seeds will germinate faster
9. During storage, a farmer notices moisture in grain sacks and slight fungal growth. What should he do to prevent this? (1)
 (A) Add more fertilizers (B) Spray pesticide
 (C) Properly dry the grains before storage (D) Mix ash with the grains

For question numbers 10 to 12, two statements are given-one labelled Assertion and the other labelled Reason. Select the correct answer to these questions from the codes (A), (B), (C) and (D) as 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.
10. A: A nail is made sharp at one end of it so that it can pierce through a wood. (1)
 R: Pressure increases with increase in area.
11. A: Petrol and diesel are obtained by the process of destructive distillation of coal. (1)
 R: Destructive distillation of petrol produces coal gas, coal tar, and coke.
12. A: Threshing is the process of separating seeds from stalks. (1)
 R: Threshing can only be done manually without any machines.
13. When a force acts on an object what are the changes it can impart on the object? Give one example each. (2)
14. Why is petrol an exhaustible natural resource, whereas sunlight is not? Explain. (2)
15. Why should not the crop residues be burnt in the field, even though it is a quick method to clean fields after harvesting? (2)
16. A farmer is using traditional irrigation methods but is facing water scarcity in her locality. Suggest an alternate irrigation method and justify why it is more efficient. (3)
17. List out any three components obtained from Petroleum. Also write their applications. (3)
18. Observe the figure and answer the following questions. Here, coal is strongly heated in the absence of air. (3)

- (a) If Y is coal tar, then name the products X and Z?
 (b) Write any four uses of coal tar.



19. Write an activity to show that liquid pressure increases as the depth increases. Draw the necessary diagram. (3)
20. (a) Define pressure. What is its SI unit? (5)
(b) A rectangular block of dimension 5 m x 3 m x 2m weighing 50 kgwt is placed on a horizontal floor with its side 3m x 2m. What is the pressure exerted by the block on the floor? (1 kgwt = 10 N)

21.

(5)



(A)



(B)

- (a) Identify and name the sowing method shown in the pictures A and B.
(b) "Proper sowing method influences the overall yield." Justify the given statement.
(c) Explain why the depth at which seeds are sown is important for proper growth. Mention any two consequences of sowing the seeds too deep or too shallow.