



CLASS: VIII
DATE : 18/01/2024

MAX. MARKS: 20
TIME: 40 MINUTES

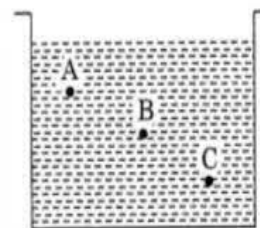
General Instructions:

- i. This question paper consists of 10 questions in 5 sections.
- ii. All questions are compulsory. However, an internal choice is provided in some questions. Student is expected to attempt only one of these questions.
- iii. **Section A** consists of six objective type questions carrying 01 mark each.
- iv. **Section B** consists of one very short question carrying 02 marks.
- v. **Section C** consists of one short answer type question carrying 03 marks.
- vi. **Section D** consists of one question carrying 05 marks.
- vii. **Section E** consists of one case-based question carrying 04 marks with sub-parts.

SECTION – A

Select and write the one most appropriate option out of the four options given for each of the questions 1 to 4.

Q. No	Questions	Marks
1	A person X pushes a cart with a force. Another person Y starts pushing the cart in the opposite direction with the same force. How does it affect the cart? (a) It brings the cart to rest (b) It changes the direction of cart (c) It increases the speed of the cart (d) It will change the shape of the cart	1
2	A container is filled with water as shown in the given figure. Which of the following statements is correct about the pressure of water? (a) Pressure at A > Pressure at B > Pressure at C (b) Pressure at A = Pressure at B = Pressure at C (c) Pressure at A < Pressure at B > Pressure at C (d) Pressure at A < Pressure at B < Pressure at C	1
3	A batsman hits the ball for a boundary run. Here the batsman (a) changes only the direction of the ball. (b) changes only the speed of the ball. (c) changes both the direction and speed of the ball. (d) does not change either direction or speed.	1
4	Which of the following statements are correct? (i) Sound is produced by vibrations. (ii) Sound requires a medium for propagation. (iii) Light and sound both require a medium for propagation. (iv) Sound travels slower than light. (a) i & ii (b) i, ii & iii (c) ii, iii & iv (d) i, ii & iv	1



Q. no 5 and 6 are Assertion - Reasoning based questions.

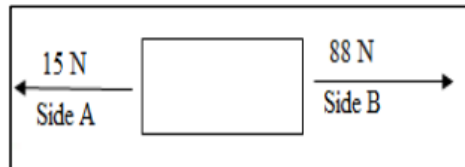
These consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A
- (b) Both A and R are true and R is not the correct explanation of A
- (c) A is true but R is false
- (d) A is false but R is true

5	Assertion (A): Water begins to flow towards the ground as soon as we open a tap. Reason (R): The force of gravity can make things/objects fall towards the Earth as it pulls them.	1
6	Assertion (A): The streamlined shape of birds and fishes does not help them move easily in fluids. Reason(R): This streamlined shape helps in overcoming drag without spending much energy.	1

SECTION - B

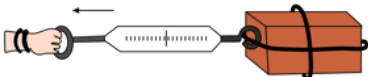
7	In a tug of war, Side A applies 15N force and side B applies 88N force. Which side will the rope move? What will be the net force acting on the rope?	2
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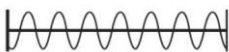
SECTION - C

8	(a) When you are running on the road, you are acted upon by the frictional force of the road. Identify and name another force of friction acting on you. (b) When two thermocol balls are held close to each other, they move away. Name the force which might be responsible for this phenomenon. Explain. (c) The pressure of gas contained in a cylinder with a movable piston is 300 Pa. The area of the piston is 50 m ² . Calculate the force exerted on the piston	3
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SECTION - D

9	Brick is pulled by a spring balance as shown in the figure.  (a) what does the reading of the spring balance when the brick just begins to slide indicate? (b) The brick is now wrapped in a piece of polythene. How does the reading of spring balance change and why? (c) How does the reading of the spring balance change if the brick is wrapped in jute cloth? (d) Write any two ways to reduce friction.	5
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SECTION - E

10	<p>Answer questions on the basis of your understanding of the following paragraph and the related studied concepts:</p> <p>On Ramesh's 13th birthday, his father invited all his friends and their relatives. It was a big party with lots of food and DJ. Ramesh didn't like the loud sound of DJ and asked his father to play it in low volume so that their neighbours would not get disturbed and people in the party could also enjoy the music. Ramesh's father felt good for his wisdom and did as he said.</p> <p>(a) Write any two measures to limit noise pollution.</p> <p>(b) (i) The image shows the sound waves produced by a man and a woman. What can be concluded from the image?</p> <div style="display: flex; flex-direction: column; align-items: flex-start;"> <div style="display: flex; align-items: center; margin-bottom: 10px;">   </div> <div style="display: flex; align-items: center;">   </div> </div> <p>(ii) How many times per second should vibrating body oscillate to make an audible sound for humans?</p> <p style="text-align: center;">OR</p> <p>(b) When we put our ears on a railway line, we can hear an approaching train even when the train is far off, but its sound cannot be heard through the air. Why?</p>	4
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