

Class: VIII

Time : 90 min

Subject: SCIENCE

Max Marks: 40

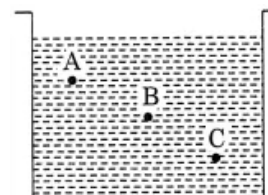
**General Instructions:**

1. This question paper consists of four sections A,B,C,D with 27 questions and all the questions are compulsory.
2. **Section A** : QNo.1 to 15 are very short answer questions (VSA) carrying one mark which include multiple choice type questions (MCQ), Assertion and Reason type and case study type questions.
3. **Section B** : Question No 16 to 19 are Short Answer Type – 1 (SA -1, carrying 2 marks each.
4. **Section C** : Question No. 20 to 23 are Short Answer Type – II (SA- II), carrying 3 marks each.
5. **Section D** : Question No. 24 is Long Answer Type (LA) question, carrying 5 marks.
6. Draw a neat labelled diagram wherever necessary.

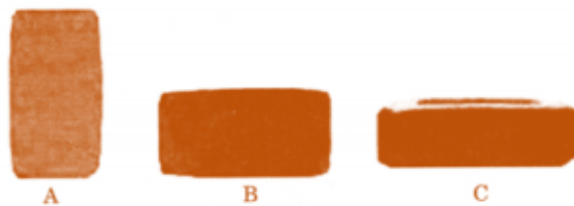
**SECTION- A**

**I. Choose the correct option from the following. (1x10=10M)**

1. The reproductive phase of a woman lies between her \_\_\_\_\_ and menopause.  
(a) menstrual cycle (b) menstruation (c) menarche (d) ovulation
2. When the hammer strikes the gong of an electric bell, which of the following force is responsible for the movement of hammer?  
(a) Gravitational force alone (b) Magnetic force alone  
(c) Electrostatic force alone (d) Frictional force alone
3. A container is filled with water as shown in the given figure. Which of the following statements is correct about 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
4. Rolling friction is smaller than?  
(a) Fluid friction (b) Sliding friction (c) Static friction (d) all of these



5. A brick is kept in three different ways on a table as shown in given figure. The pressure exerted by the brick on the table will be



- (a) maximum in position A
- (b) maximum in position C

- (c) maximum in position B
- (d) equal in all cases

6. A boat or an aeroplane has a pointed or tapering front / head. Why?

- (a) To increase the friction of fluid
- (b) To reduce the friction of fluid
- (c) To look good
- (d) For no reason

7. Sound propagates maximum in

- (a) Gas
- (b) Liquid
- (c) Solid
- (d) All

8. Sound is kind of

- (a) Work
- (b) Energy
- (c) Force
- (d) None

Question No. 9 to 11 consist of two statements – **Assertion (A)** and **Reason (R)**. Answer the question selecting the appropriate option given below:

- a) Both Assertion and Reason are true and Reason is the correct explanation of Assertion.
- b) Both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
- c) Assertion is true but Reason is false
- d) Assertion is False but Reason is true.

9. **Assertion:** Parents and teachers of adolescents should be alert of the sudden unusual change in the behaviour of the adolescents.

**Reason:** The sudden change in behaviour might be due to drug/alcohol abuse or smoking .

10. **Assertion:** The sound produced by the flute is shriller than the sound produced by a table.

**Reason:** Frequency produced by the flute will be greater than the frequency produced by the table.

11. **Assertion:** The pressure increases with increase in the depth of sea.

**Reason:** Pressure is directly proportional to the depth/height of the column of water.

12. Which of the following cannot be charged easily by friction?

(a) plastic scale (b) copper rod (c) inflated balloon (d) woollen mask

13. 1 Hz is equal to

(a) 1 vibration per minute (b) 10 vibrations per minute

(c) 60 vibrations per minute (d) 600 vibrations per minute

**Read the following passage and answer questions 14 and 15.**

Friction is a force between two surfaces that are sliding, or trying to slide, across each other. Friction always works in the direction opposite to the direction in which the object is moving, or trying to move. It always slows a moving object down. Friction also produces heat.

14. Name any two substances are used to reduce friction.

15. Give 2 examples where friction is a foe.

## SECTION – B

**II. Answer the following questions.**

**(2x 4=8M)**

16. The loudness of sound depends upon the amplitude of the sound wave. If the amplitude of a sound wave is increased 3 times, by how many times will the loudness of the sound increase?

17. In the game of tug-o-war the two teams are applying force on the rope. The rope still does not move. What do you infer about the magnitude and the direction of the forces applied by both teams?

18. Why is pituitary gland called ‘Master Gland’?

19. What is atmospheric pressure? How much weight of air does a person carry on his head? Why do we not get crushed under this weight?

### SECTION – C

**III. Answer the following questions in three to four sentences.**

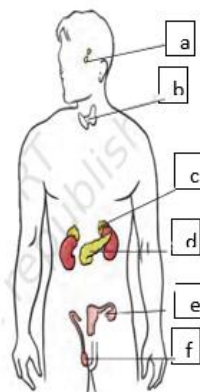
**(3x 4=12M)**

20. Describe an activity to show that liquids exert equal pressure at equal heights. (3M)

21. i) What is the value of sliding friction for an object which requires 17 N of force to move it from rest? Justify your answer. (1M)

ii) Why are grooves made in the outer sole of sport shoes? (2M)

22. i) What is the difference between music and sound? (1M)



ii) Identify the part which vibrates to produce sound in the following musical instruments

(2M)

Guitar, flute, dholak, cymbals

23. In the figure given, name the endocrine glands which release the hormones that (3M)

a. Controls the release of sex hormones.

b. prevents goitre

c. maintains the correct salt balance in the blood.

d. prevents diabetes

e. is responsible for the secondary sexual characters in girls

f. is responsible for the secondary sexual characters in boys.

### SECTION – D

**IV. Read the passage and answer the following questions. (5M)**

24. There are many wrong notions related to human reproduction which should be discarded as informed adolescents. For example, there are myths and taboos regarding bodily changes that adolescents experience.

1. Mention any three such myths. (3M)
2. List the important changes that take place at puberty. (2M)