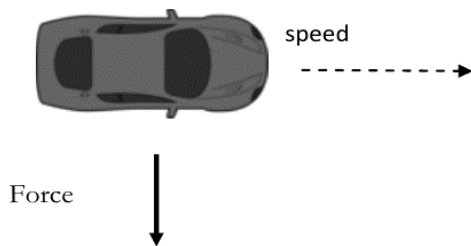


SATISH CHANDRA MEMORIAL SCHOOL
Class Test (Reasoning and A-R based questions)
SCIENCE
Class VIII
Maximum Marks: 20
Time: 40 Minutes

Section-A

Reasoning based questions(**10×1=10**)

1. Does applying a force perpendicular to the motion of a car affect its direction?



- a) No, it will not
- b) Yes, it will change direction
- c) It will stop
- d) It will move in opposite direction

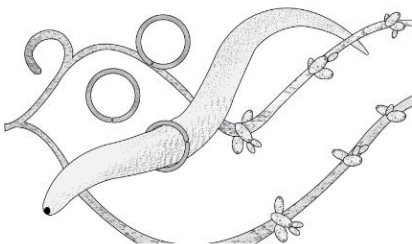
2. Why is sexuality considered important in our lives?

- a) it's a fundamental aspect of human existence
- b) It is related to financial stability.
- c) It determines academic success.
- d) It has no impact on social interactions.

3. Why do frogs and fish lay so many eggs?

- a) To ensure a higher survival rate for some offspring.
- b) To reduce competition among their young.
- c) To increase parental investment in care.
- d) To adapt to colder climates.

4. How do fungi help in the biological control of nematodes?



- a) By eating them
- b) By blocking them
- c) By symbiosis method
- d) By electrocution

5. We know mass is constant, but we burn 100 kg of wood and get around 3 kg of ash-why?

- a) Mass remains constant- this concept is wrong
- b) Mass depends on weight of the flammable substance

- c) Rest of the amount is gaseous substance
 - d) We cannot burn wood
6. Why doesn't fire go inside an LPG cylinder and cause it to burst?



- a) Gas is liquefied, so fire cannot go inside
- b) Inside pressure of gas is so high
- c) LPG is clean fuel
- d) No oxygen is present inside

7. Why do firecrackers produce different colors when they burn?

- a) due to different pressure
- b) due to different brand
- c) due to different chemicals
- d) due to different quality of fuel

8. Why does fire show different colors in sources like candle flames?

- a) Due to difference in supply of oxygen in different regions of flame.
- b) Due to the shape of the flame.
- c) Because of the size of the flame.
- d) Because flames have the different temperature everywhere.

9. The roof and walls of the auditorium are covered with sound absorbent material. Generally, the ceilings of concert halls, conference halls and cinema halls are made curved, sometimes curved sound board may be placed behind the stage- why such set up, use keyword(s).

- a) Reduce noise
- b) Maintain echo
- c) Improve sound quality
- d) Both A and C

10. We shout or clap into a canyon or towards the rock cliffs, we hear the same sound again a little later-why?



- a) Amplitude
- b) Reflection of sound
- c) Minimum time interval between the original sound and the reflected sound for a clear echo is 0.1 seconds
- d) All of the above

Section- B

Choose the correct option for the following Assertion-Reasoning questions, Q-11 to Q-20 (10×1=10)

Options are:

- (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, but R is true.

11. Assertion (A): Excessive use of chemical fertilizers can lead to a decline in soil fertility over time.

Reason (R): Chemical fertilizers provide nutrients quickly but do not contribute to soil organic matter.

12. Assertion (A): The base of a dam is built wider than the top to withstand the pressure of water.

Reason (R): Pressure in a liquid increases with depth, which exerts a greater force on the lower parts of the dam.

13. Assertion (A): Antibiotics are used to treat bacterial infections in both humans and animals.

Reason (R): Antibiotics strengthen the immune system by increasing the production of white blood cells.

14. Assertion (A): Combustion is a chemical process in which a substance reacts with oxygen to release heat and light.

Reason (R): Combustion can occur without oxygen if a substance is heated to a high enough temperature.

15. Assertion (A): Sound travels faster in water than in air.

Reason (R): The density of water is lower than the density of air, which allows sound to travel faster.

16. Assertion (A): Sexual reproduction leads to genetic variation among offspring.

Reason (R): In sexual reproduction, offspring receive half of their genetic material from each parent, resulting in a unique combination of genes.

17. Assertion (A): Natural gas is a cleaner fuel compared to coal and petroleum.

Reason (R): Natural gas primarily consists of methane, which burns with a blue flame and produces less carbon dioxide and other pollutants.

18. Assertion (A): Poaching of endangered species can lead to their extinction.

Reason (R): Endangered species reproduce quickly, so poaching does not significantly impact their populations.

19. Assertion (A): Atmospheric pressure decreases as altitude increases.

Reason (R): As we go higher, the number of air molecules per unit volume increases, leading to a decrease in pressure.

20. Assertion (A): In sexual reproduction, meiosis occurs during the formation of gametes, resulting in cells with half the chromosome number.

Reason (R): Meiosis reduces the chromosome number so that when fertilization occurs, the resulting zygote has a full set of chromosomes, maintaining the species' chromosome count.