



**ST. MARGARET SR. SEC. SCHOOL**  
**FINAL TERM SAMPLE PAPER 2024-25**  
**SCIENCE**  
**CLASS VIII**

**Time: 2.5 hrs**  
**MM 60**

**GENERAL INSTRUCTIONS:**

- All questions are compulsory.**  
**Section A carries 1 mark each.**  
**Section B carries 2 marks each.**  
**Section C carries 3 marks each.**  
**Section D carries 5 marks each.**

**Section A**

1. What is the unit of force?  
(a) Newton  
(b) Joule  
(c) Watt  
(d) Ampere
2. Which of the following is an example of chemical combustion?  
(a) Burning of wood  
(b) Tearing of paper  
(c) Boiling of water  
(d) Melting of ice
3. Which of the following statements is correct regarding rods and cones in the human eye?  
(a) Cones are sensitive to dim light.  
(b) Cones are sensitive to bright light.  
(c) Rods are sensitive to bright light.  
(d) Rods can sense colour.
4. Which gas is primarily responsible for global warming?  
(a) Oxygen  
(b) Carbon Dioxide  
(c) Nitrogen  
(d) Hydrogen
5. The SI unit of pressure is:  
(a) Newton  
(b) Pa (Pascal)

- (c) Joule
  - (d) Watt
6. Which of the following is NOT a form of friction?
- (a) Rolling friction
  - (b) Sliding friction
  - (c) Fluid friction
  - (d) Gravitational friction
7. Sound is produced due to the vibration of:
- (a) Solids
  - (b) Liquids
  - (c) Gases
  - (d) All of the above
8. The process in which an animal gives birth to young ones is called:
- (a) Germination
  - (b) Reproduction
  - (c) Fertilization
  - (d) Pollination
9. The force of friction does not depend on:
- (a) The area of contact
  - (b) The nature of the surface
  - (c) The speed of the object
  - (d) The weight of the object
10. Which of these is a renewable source of energy?
- (a) Coal
  - (b) Natural gas
  - (c) Solar energy
  - (d) Petroleum
11. Which of the following is an example of a non-contact force?
- (a) Gravitational force
  - (b) Muscular force
  - (c) Friction
  - (d) Magnetic force
12. The process of water vapour changing into liquid water is known as:
- (a) Freezing
  - (b) Condensation
  - (c) Evaporation
  - (d) Sublimation
13. The first step in the process of hearing sound involves:
- (a) Vibrations in the cochlea
  - (b) Sound vibrations reaching the ear drum
  - (c) Sound passing through the ear canal
  - (d) Amplification of sound in the middle ear
14. In humans, the development of the fertilised egg takes place in the
- (a) ovary
  - (b) testis
  - (c) oviduct
  - (d) uterus

15. Which of the following is a disadvantage of friction?
- (a) Friction makes movement easier.
  - (b) Friction causes wear and tear of objects.
  - (c) Friction reduces speed.
  - (d) Friction helps in walking.
16. The movement of the earth's plates causes
- (a) cyclones
  - (b) lightning
  - (c) earthquakes
  - (d) thunderstorms

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**17. Sound needs a medium like solid, liquid or gas to travel. In humans, sound is produced by the voice box called larynx. Humans can hear the sound in the range of 20 Hz to 20,000Hz. The loudness of the sound depends on the amplitude of vibrations while the shrillness of sound depends on the frequency of sound waves. Drum has a low frequency and so produces a low pitch sound while whistle has a high frequency and produces a shrilling high pitch sound.**

(i) What will happen to the sound, if a bell producing sound is kept in a jar in vacuum?

- (a) sound will increase
- (b) sound will decrease
- (c) no sound is heard
- (d) intermittent sound can be heard

(ii) Loudness of sound depends upon

- (a) amplitude
- (b) frequency
- (d) range of audible sound
- (c) time-period of the vibration

(iii) Females generally have high pitch sound because

- (a) they have long vocal chords
- (b) they have short vocal chords
- (c) amplitude of female voice is more
- (d) female voice has low frequency

(iv) The drum produces sound.

- (a) high frequency
  - (b) high pitch
  - (c) shrilling
  - (d) low frequency
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### 18. Assertion and Reasoning

**(A)Assertion:** Combustion requires oxygen to take place.

**Reason:** Oxygen is a reactant in the combustion process.

- a) Both assertion and reason are correct, and reason is the correct explanation.
- b) Both assertion and reason are correct, but reason is not the correct explanation.
- c) Assertion is correct, but reason is incorrect.
- d) Assertion is incorrect, but reason is correct.

**(B)Assertion:** Adolescence is a stage of rapid growth and changes in the human body.

**Reason:** During adolescence, physical, emotional, and hormonal changes occur.

- a) Both assertion and reason are correct, and reason is the correct explanation.
- b) Both assertion and reason are correct, but reason is not the correct explanation.
- c) Assertion is correct, but reason is incorrect.
- d) Assertion is incorrect, but reason is correct.

**( C)Assertion:** Sound cannot travel through a vacuum.

**Reason:** Sound waves need a medium (solid, liquid, or gas) to propagate.

- a) Both assertion and reason are correct, and reason is the correct explanation.
- b) Both assertion and reason are correct, but reason is not the correct explanation.
- c) Assertion is correct, but reason is incorrect.
- d) Assertion is incorrect, but reason is correct.

**(D)Assertion:** Friction between two surfaces increases when the weight of the object increases.

**Reason:** Friction depends on the weight of the object and the roughness of the surface.

- a) Both assertion and reason are correct, and reason is the correct explanation.
- b) Both assertion and reason are correct, but reason is not the correct explanation.
- c) Assertion is correct, but reason is incorrect.
- d) Assertion is incorrect, but reason is.

19. What is the role of decomposers in an ecosystem?
20. Define the term adolescence and mention two physical changes that occur during this stage.
21. What is the significance of friction in our daily life?
22. Explain how sound is produced.
23. What is the chemical effect of electricity on water?
24. How is reproduction in hydra different from that in amoeba?
25. Explain why we see lightning before hearing thunder.
26. Define Electroplating?
27. Explain the different types of combustion.
28. Define fertilization.
29. Describe the structure of the human ear and how it helps in hearing.
30. Explain the phenomenon of reflection with the help of an example.

### **Section B (2 marks each)**

31. Explain sex determination in humans.(2)
32. What are the changes come in adolescent age.(2)
33. What are the different types of friction? Explain each type briefly.(1+1)
34. Define the terms frequency and time period of a sound wave.(1+1)
35. How does light travel? Describe its straight-line propagation property.(1+1)

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### **Section C (3 marks each)**

36. Describe the process of reproduction in humans with an example of sexual reproduction.
37. Explain the structure of the human ear and how it helps in hearing sound.

38. What are the causes of pollution? Explain the different ways to reduce pollution in the air and water.

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**Section D (5 marks)**

39. Explain the phenomenon of light. Discuss the laws of reflection with the help of suitable diagram and their practical applications.