

CHAPTER 4  
SIMPLE MACHINES

Questions:

1. What is a machine?
2. What is a simple machine?
3. How does a simple machine work?
4. What is a Complex machine?
5. Which simple machine has the magnitude of applied force?
6. What are the major types of simple machine?
7. Give the formula for mechanical advantage of a lever.
8. What is mechanical advantage?
9. What is speed multiplier?
10. What is fulcrum?
11. What is the principle of a lever?
12. What are the types of pulley?
13. Give two examples for fixed and movable pulleys?
14. The mechanical advantage of a class three lever?
15. The human arm act as which order of the lever?
16. Define wedge.
17. Name a simple machine which acts as a force multiplier.
18. What is a screw?
19. How can one increase the mechanical advantage of a screw?
20. Why a crowbar is an example of lever of the first order?
21. Why cranes make use of a movable pulley?
22. Name the simple machine which has cylindrical piece of metal with pointed end and spirally threaded surface to join things together.
23. A door stopper is an example of which simple machine?
24. People use it to lift a heavy vehicle in a junkyard. What is it?

CHAPTER 5  
LIGHT

Questions

1. Differentiate Luminous under non luminous object.
2. Define Ray.
3. What is beam?
4. What is rectilinear propagation of light?
5. What are the uses of rectilinear propagation of lights?

6. What are the advantages of pinhole camera?
7. What is a divergent and convergent beam of lights?
8. What is shadow?
9. Differentiate umbra and penumbra.
10. What is an extended source of lights what is an eclipse?
11. Differentiate solar under lunar eclipse?
12. What is an Opaque object?
13. What is a point source of light?
14. When does a solar eclipse occur?
15. Why the box of the pinhole camera should be light proof?
16. Why light source cannot be seen through a bent tube?

## **CHAPTER 6 MAGNETISM**

### **Questions**

1. What is magnetism?
2. What is known as magnetic force of attraction?
3. What are the metals can be attracted by magnets?
4. Who discovered magnets first?
5. Differentiate artificial and natural magnets?
6. What is lodestone?
7. Discuss about the magnetism of the earth.
8. What is directive property?
9. What is magnetic field?
10. What are magnetic lines of force?
11. What is single touch method?
12. What are the most commonly used to methods of magnetization?
13. What is electromagnet
14. Why the directional alignment of a bar magnet is possible?
15. Why the directional property of magnets is very useful?
16. Give two examples of artificial magnets?
17. What is the use of magnetic keepers?
18. What is demagnetisation?
19. What are magnetic materials?
20. Why the Magnetic Strength of an Electromagnet depends on the material to be magnetized?
21. What precautions should be taken while storing magnets?
- 22.**How can electricity be used to make artificial magnets?