



WORKSHEET-2

---

**Multiple Choice questions**

- Electric current is the flow of  
(a) Proton (b) Electron (c) Neutron (d) Positron
- Which of the following materials is a conductor?  
(a) Silver (b) Plastic (c) Cloth (d) Rubber
- A device that prevents or allow the current to flow through it  
(a) Motor (b) Conductor (c) Switch (d) Terminal
- When two or more cells are joined together it forms a  
(a) Dynamo (b) Transistor (c) Battery (d) Insulator
- Bouncing back of light in the same medium is called  
(a) Refraction (b) Reflection (c) Rarefaction (d) Retardation
- When light bounces off a surface, the surface is  
(a) Reflector (b) Opaque (c) Transparent (d) Translucent
- A common magnifying glass is an example of  
(a) Concave mirror (b) Convex mirror (c) Convex lens (d) Concave lens
- Shaving mirror are usually  
(a) Concave (b) Convex (c) Plane (d) Biconvex
- Reproductive part of a plant is the  
(a) Root (b) Flower (c) Stem (d) Leaf
- The process of fusion of the female and the male gametes is called  
(a) Fertilization (b) Seed formation (c) Reproduction (d) Layering
- In the flowering plants, male gametes are formed inside the  
(a) Pistil (b) Ovary (c) Ovule (d) Anther
- The mature ovary forms the  
(a) Seed (b) Pistil (c) Fruit (d) Stamen

## **Fill in the blanks.**

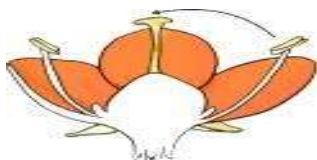
13. A group of two or more cell is called a \_\_\_\_\_.
14. A device that breaks the circuit is called a \_\_\_\_\_.
15. In electric circuit the electrons flow from \_\_\_\_\_ terminal to the \_\_\_\_\_ terminal.
16. Metals are \_\_\_\_\_ conductor.
17. A device which converts electric energy into light energy is \_\_\_\_\_.
18. Bodies which give out their own light are called \_\_\_\_\_.
19. Regular reflection takes place from the \_\_\_\_\_ surfaces.
20. A \_\_\_\_\_ refers to collection of rays.
21. \_\_\_\_\_ Mirror is used as rear view mirror in automobiles.
22. White light is composed of seven \_\_\_\_\_.
23. The male reproductive part of flower is \_\_\_\_\_.
24. The male gametes and the female gamete join to form a single cell called \_\_\_\_\_.
25. \_\_\_\_\_ is ripened ovary.
26. Potato is a modified \_\_\_\_\_.

## **Short Answer questions**

27. Why do we use nichrome in an electric heater?
28. What is a fuse? Write its function?
29. Write difference between a cell and a battery?
30. Give one word for the following:
  - Path of electric current
  - A device that create potential difference.
  - A safety device that protects appliances from overloading and short circuit.
  - Magnet produced by electricity.
31. How is the rainbow formed?
32. What is spectrum?
33. Write the laws of reflection?
34. Write difference between real and virtual image?
35. What is pollination? Name two types of pollination.
36. What is vegetative reproduction? Write its advantages.

37. Write the difference between asexual and sexual reproduction?  
38. Define lateral inversion  
39. Name the type of asexual reproduction in the following organisms:-  
(a) Yeast (b) Bread mold (c) Rose (d) Banana (e) Spirogyra

40. Which type of pollination does Figure 12.1 indicate?



41. One morning as Paheli strolled in her garden she noticed many small plants which were not there a week ago. She wondered where they had come from as nobody had planted them there. Explain the reason for the growth of these plants.

### **Long Answer Questions:**

42. Describe the method by which yeast reproduces sexually.  
43. Write two disadvantages of cross-pollination?  
44. A car moving at a speed of 50Km/hr. What is its speed?  
45. How is velocity different from acceleration?  
46. Explain the role of a miniature circuit breaker.  
47. Describe the heating effect of an electric current.  
48. How does an electromagnet make an electric bell work?  
49. Why is the word Ambulance written laterally on the vehicle.  
50. Differentiate between a converging and diverging mirror.  
51. Name some devices which uses heating effect of electric current.  
52. Which effect of electric current is utilized: a). in an electric iron b). in an electric bulb.  
53. Which material is used as heating element in most appliances? Why?  
54. What will happen when a magnetic compass is brought near a current carrying wire?  
55. What is the advantage of CFL over ordinary bulb?  
56. List three characteristics of wires that affect the amount of heat produced.

57. An electrician is carrying out some repairs in your house. He wants to replace a fuse by a piece of wire. Would you agree? Give reasons for your response.
58. What is an electromagnet? List some applications of electromagnets.
59. Explain why, any metal wire or metal strip cannot be used in place of fuse wire.
60. How is an electric fuse different from an MCB? Which one is better? Give reason
61. How will you prove that electromagnets are temporary magnets?

### III. Assertion & Reasoning

**Directions:** In the following questions, a statement of assertion is followed by a statement of reason.

**Mark the correct choice as:**

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

62. **Assertion:** Seeds are the product of sexual reproductions in plants  
**Reason:** Seeds are not produced in potatoes

63. **Assertion:** The heat produced by a heating element depends on the current passed through the heating element.  
**Reason:** Heating elements are generally made of specific metal alloys like nichrome, maganin and constantan.

64. **Assertion:** Cameras, telescopes & binoculars use concave lenses in combination with convex to improve the quality of the images they form  
**Reason:** The lens in our eye is a convex lens that helps to focus light on the retina.

\*\*\*\*\*