

**CHAPTER 10 : PHENOMENA OF ELECTRICITY & MAGNET****Instructions:**

- ✓ Read the chapter in your book - quickly and thoroughly, preferably more than once.
  - ✓ Watch the uploaded video class from school's website/YouTube channel. For becoming more clear about the basics, watch more than once, if needed.
  - ✓ Contact me in case of any difficulty in understanding.
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**MCQs****(Solve yourself)**

- 1.** Elements are composed of -
  - a) molecules
  - b) atoms
  - c) cells
  - d) all the above
- 2.** Atoms consists of electron, proton and -
  - a) neutron
  - b) nucleus
  - c) chloroplast
  - d) nucleus
- 3.** How is proton charged?
  - a) negatively
  - b) neutrally
  - c) positively
  - d) none of the above
- 4.** Which of the components of an atom is negatively charged?
  - a) neutron
  - b) proton
  - c) nucleus
  - d) electron
- 5.** Why is charge created in a substance?
  - a) due to rubbing
  - b) due to application of heat
  - c) due to gravity
  - d) all the above
- 6.** Charges of same nature \_\_\_\_\_ each other.
  - a) attract
  - b) repel
  - c) are parallel to
  - d) are perpendicular to
- 7.** Which of the following is not a conductor?
  - a) silver
  - b) copper
  - c) aluminium
  - d) glass
- 8.** Which of the following is a semi-conductor?
  - a) iron
  - b) gallium
  - c) plastic
  - d) rubber

- 9.** What is called the path through which electricity passes?  
a) channel  
b) circuit  
c) orbit  
d) none of the above
- 10.** Which of the following wire is used in an electric bulb?  
a) copper wire  
b) iron wire  
c) tungsten wire  
d) none of the above
- 11.** In how many ways can magnets be prepared artificially?  
a) 2  
b) 3  
c) 4  
d) 5
- 12.** The south pole of earth's magnet works as \_\_\_\_\_ pole?  
a) east  
b) west  
c) south  
d) north
- 13.** Which is used to pick-up heavy loads?  
a) electric chord  
b) thread  
c) switch  
d) electromagnet
- 14.** Which one is semi-conductor?  
a) water  
b) gold  
c) silicon  
d) rubber
- 15.** Which one is the non-magnetic substance?  
a) iron  
b) nickel  
c) silver  
d) steel
- 16.** Transforming magnetic substance into magnets by how many process?  
a) 1  
b) 2  
c) 3  
d) 4
- 17.** The aim of using regulator in electric fan is to -  
a) increase the longevity of fan  
b) decrease sound  
c) control motion  
d) decrease cost
- 18.** Based on the properties of magnets which of the following substance belong to same group?  
a) nickel, silver, copper  
b) gold, copper, silver  
c) cobalt, iron, nickel  
d) iron, mercury, aluminium
- 19.** What is happened when two matters are rubbed?  
a) light energy is produced  
b) number of electron is decreased  
c) charge is destroyed  
d) charges move from one to other
- 20.** What is flow of electricity?  
a) flow of neutrons  
b) flow of protons  
c) flow of electrons  
d) flow of positrons

**21.** In which direction electricity flows?

- a) from positive charge to negative charge
- b) from neutral charge to positive charge
- c) from neutral charge to negative charge
- d) from negative charge to positive charge

**22.** Which non-metal is a conductor of electricity?

- a) oxygen
- b) nitrogen
- c) helium
- d) carbon

**23.** Which one is a conductor?

- a) silver
- b) glass
- c) copper
- d) aluminium

**24.** What actually is moved by a conductor?

- a) neutron
- b) positron
- c) proton
- d) electron

**25.** Where the power of attraction of magnet is more?

- a) at the north pole of the magnet
- b) at the south pole of the magnet
- c) at both the south and north poles of the magnet
- d) the attraction is equal in all places of the magnet

**26.** Semi-conductors -

- i. behaves like non-conductor at low temperature
- ii. behaves like conductors at high temperature
- iii. they always conduct electricity

Which one is correct?

- a) i and ii
- b) ii and iii
- c) i and iii
- d) i, ii and iii

**27.** Use of magnet -

- i. magnet is used in electric fan
- ii. magnet is used in calling bell
- iii. compass needle is made by magnet

Which one is correct?

- a) i and ii
- b) ii and iii
- c) i and iii
- d) i, ii and iii

**In the light of the following paragraph, answer the questions 28 and 29.**

The two glass rods repel each other when they are rubbed with silk. Again the two rods made of rubber repel each other when they are rubbed with the same. But the glass rod and the rubber rod attach each other.

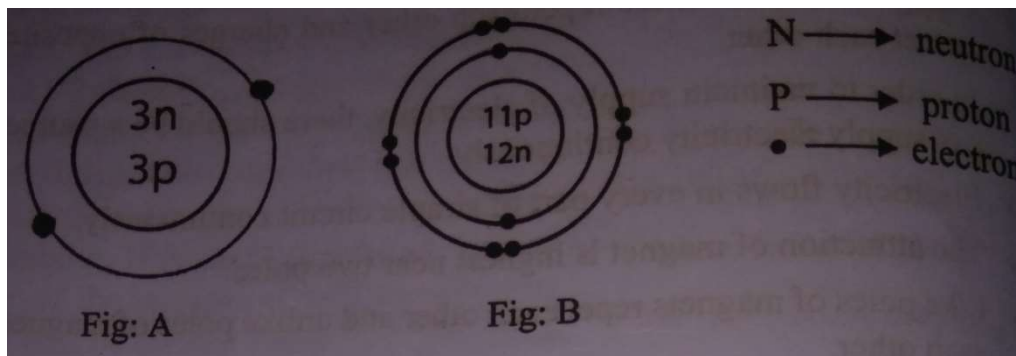
**28.** Why do the glass rod and rubber rod attract each other?

- a) there are charges of similar properties in glass rod and rubber rod.
- b) the glass rod is charged and the rubber rod is not charged
- c) There are charges of opposite properties in the glass rod and rubber rod
- d) the glass rod is not charged and the rubber rod is charged

29. Which one of the following is correct?

- The glass rod is positively charged.
- the rubber rod is negatively charged.
- the glass rod is negatively charged.
- both glass rod and rubber rod are positively charged.

Observe the following figures carefully and answer the questions 30 and 31.



30. The characteristics of figure A is: it is

-

- charge neutral
- positively charged
- imbalance in charge

31. In case of figure A and B -

- A is negatively charged
- B is positively charged
- A and B have attraction
- A and B have repulsion

Which of the following is correct?

- i
- ii
- iii
- ii and iii

Observe the following figures carefully and answer the questions 32, 33 and 34.

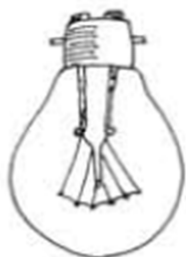


Fig. : Electric Bulb

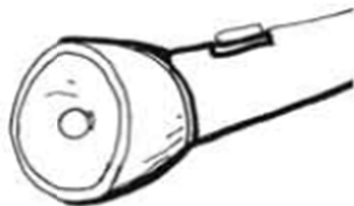


Fig. : Torch Light

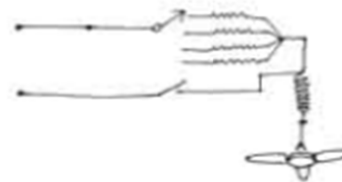


Fig. : Electric Fan

**32.** What is called the coil used in an electric bulb?

- a) filament
- b) spring
- c) regulator
- d) circuit

**33.** What is used to control the motion of a fan?

- a) main switch
- b) regulator
- c) circuit
- d) adaptor

**34.** What kind of energy exists in the battery of a torch light?

- a) current energy
- b) static energy
- c) kinetic energy
- d) light energy