

EXERCISE # 1

EXERCISE QUESTIONS

- Q.1** Write T against true and F against false in the following statements:
- Like charges attract each other (T/F)
 - A charged glass rod attract a charged plastic straw (T/F)
 - Lightning conductor cannot protect a building from lightning (T/F)
 - Earthquakes can be predicted in advance (T/F)
- Q.2** Sometime, a crackling sound is heard while taking off sweater during winters. Explain.
- Q.3** Explain why a charged body loses its charge if we touch it with our hand.
- Q.4** Name the scale on which the destructive energy of an earthquake is measured. An earthquake measures 3 on this scale. Would it be recorded by a seismograph? Is it likely to cause much damage ?
- Q.5** Suggest three measures to protect ourselves from lightning.
- Q.6** Explain why a charged balloon is repelled by another charged balloon whereas an uncharged balloon is attracted by another charged balloon ?
- Q.7** Describe with the help of a diagram an instrument which can be used to detect a charged body.
- Q.8** List three states in India where earthquakes are more likely to strike.
- Q.9** Suppose you are outside your home and an earthquake strikes. What precaution would you take to protect yourself ?
- Q.10** The weather department has predicted that a thunderstorm is likely to occur on a certain day. Suppose you have to go out on that day. Would you carry an umbrella? Explain.
- Q.11** What is the use of step leader ?
- Q.12** What to do mean by lightning conductor ? Write their importance.
- Q.13** Why do we hear a thunder after lightning ? Explain.
- Q.14** Give one importance property of electric charge.
- Q.15** Explain the working of seismograph with the help of a diagram.
- Q.16** Define seismology.
- Q.17** Write the process of occurring of earthquake.
- Q.18** Explain the following terms with respect to earthquakes :
- Focus
 - Epicentre
- Q.19** Write a note on the precautions we should take while designing buildings to reduce loss of life and property due to an earthquake.

EXERCISE # 2

Single Correct Answer type Questions

- Q.1** Which of the following cannot be charged easily by friction ?
 (A) A plastic scale
 (B) A copper rod
 (C) An inflated balloon
 (D) A woollen cloth.
- Q.2** When a glass rod is rubbed with a piece of silk cloth the rod -
 (A) and the cloth both acquire positive charge.
 (b) becomes positively charged while the cloth has a negative charge.
 (c) and the cloth both acquire negative charge.
 (d) becomes negatively charged while the cloth has a positive charge.
- Q.3** Generally lower part of clouds has
 (A) positive charge
 (B) negative charge
 (C) zero charge
 (D) any type of charge
- Q.4** Electric charges are
 (A) only positive
 (B) only negative
 (C) either positive or negative
 (D) insulators
- Q.5** In a neutral object, there are
 (A) equal number of atoms
 (B) more positive charges than negative charges
 (C) more negative charge than positive charge
 (D) equal number of positive and negative charges
- Q.6** In the air the path of lightning goes up to a temperature of about :
 (A) 300°C (B) 3,000°C
 (C) 300,000°C (D) 30,000°C
- Q.7** A lightning conductor
 (A) conducts light
 (B) stops lightning
 (C) protects buildings from the damaging effects of lightning
 (D) prevents clouds from coming near a building and thus protects it
- Q.8** If you are caught in a thunderstorm you should
 (A) go and stand on a high ground
 (B) stand under a tree
 (C) take shelter indoors
 (D) all of the above
- Q.9** Charged objects exert a on each other
 (A) cloud (B) lightning
 (C) force (D) power
- Q.10** We hear a thunder because
 (A) a lot of charge goes in lightning
 (B) because lightning is very bright
 (C) because the air heats up and expands all of a sudden
 (D) clouds bang against each other
- Q.11** The correct relation between speed of light (c) and speed of sound (v_s) is
 (A) $c < v_s$ (B) $c \geq v_s$
 (C) $c \gg v_s$ (D) $c = v_s$
- Q.12** Lightning occurs because of
 (A) rain (B) electric discharge
 (C) wind (D) angry Gods
- Q.13** Which instrument is used to measure earthquake waves ?
 (A) Seismogram (B) Seismograph
 (C) Seismic wave (D) Seismology
- Q.14** The point at which the rocks on either side of the plate give way is called
 (A) focus (B) epicenter
 (C) aftershock (D) fault
- Q.15** The outermost layer of the earth is called
 (A) Mantle (B) Core
 (C) Crust (D) Center

- Q.16** The branch of science concerned with earthquakes and related phenomena is called
(A) Electrostatics (B) Optics
(C) Seismology (D) Geology
- Q.17** Earthquakes are generally followed by
(A) rain (B) after shocks
(C) thunder (D) lighting

ANSWER KEY**EXERCISE-2**

Ques	1	2	3	4	5	6	7	8	9	10
Ans	A	B	B	C	D	D	C	C	C	C
Ques	11	12	13	14	15	16	17			
Ans	C	B	B	A	C	C	B			