SCIENCE
WORKSHEET_191025
CHAPTER 12 SOME NATURAL PHENOMENA
(QUESTION PAPER)

SUBJECT: SCIENCE **MAX. MARKS : 40**
CLASS : VIII **DURATION : 1½ hr**

SECTION – A

Questions 1 to 6 carry 1 mark each.

1. Two charged objects are brought close to each other. Choose the most appropriate statement from the following options:
(a) they may attract
(b) they may repel
(c) they may attract or repel depending on the type of charges they carry
(d) there will be no effect

2. When a glass rod is rubbed with a piece of silk cloth, the rod
(a) and the cloth both acquire a positive charge.
(b) becomes positively charged while the cloth has a negative charge.
(c) and the cloth both acquire a negative charge.
(d) becomes negatively charged while the cloth has a positive charge.

3. Consider the list of terms given below
(i) Tsunami
(ii) Landslide
(iii) Floods
(iv) Lightning
Earthquakes can cause
(a) (i), (ii) & (iii) (b) (ii) & (iv) (c) (ii), (iii) & (iv) (d) (iii) & (iv)

4. The outermost layer of earth is called
(a) mantle (b) outer core (c) crust (d) inner core

5. Consider the list of terms given below:
(i) Seismic Zone
(ii) Fault Zone
(iii) Mantle
(iv) Inner Core
The boundaries of the earth's plate are known as
(a) (i) & (ii) (b) (i) & (iii) (c) (iii) & (iv) (d) (ii), (iii) & (iv)

6. In the below question, a statement of Assertion (A) is followed by a statement of Reason (R). Mark the correct choice as
Assertion (A): Lightning conductor is a device used to protect buildings from lightning.
Reason (R): Lightning strikes could destroy life and property.
(a) Both assertion (A) and reason (R) are true and reason (R) is the correct explanation of assertion (A).
(b) Both assertion (A) and reason (R) are true but reason (R) is not the correct explanation of assertion (A)
(c) Assertion (A) is true but reason (R) is false.

(d) Assertion (A) is false but reason (R) is true.

SECTION – B

Questions 7 to 10 carry 2 marks each.

7. What are the causes of sparking?

8. Explain why a charged body loses its charge if we touch it with our hand.

9. How many different types of charges are there? Write the nature of charges on glass rod and silk cloth when they are rubbed each other?

10. What is static electricity? How is it different from electric current?

SECTION – C

Questions 11 to 14 carry 3 marks each.

11. What is lightning conductor? How does it protect building from lightning?

12. Define earthing. What is the main purpose of providing earthing in buildings?

13. What are fault zones? Name the fault zones in India.

OR

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?

14. Explain why a charged balloon is repelled by another charged balloon whereas an uncharged balloon is attracted by another charged balloon.

OR

Draw a labelled diagram of the structure of earth.

SECTION – D

Questions 15 to 16 carry 5 marks each.

15. Explain the construction and working of electroscope.

OR

Describe with the help of a diagram an instrument which can be used to detect a charged body.

16. Explain the mechanism of thunderstorms.

OR

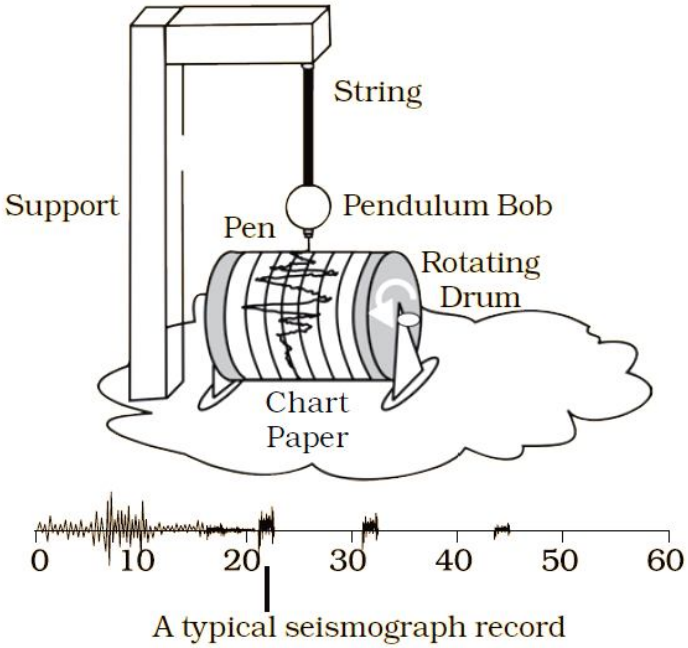
How can you save yourself from lightning?

SECTION – E (Case Study Based Question)

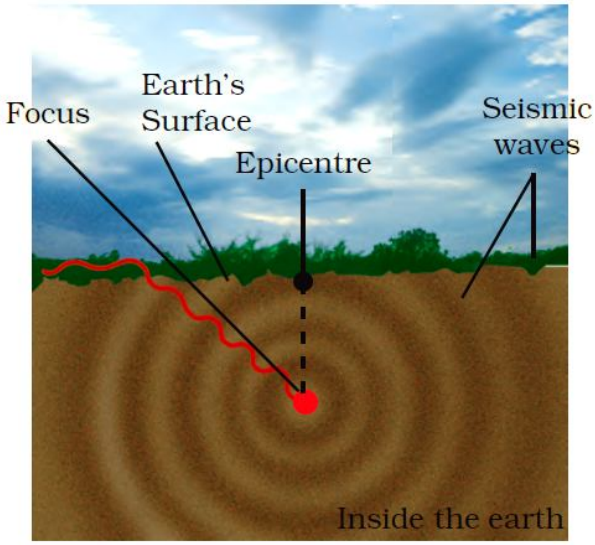
Question 17 carry 4 mark

17. The weather department can warn about a thunderstorm developing in some area. There is, however, one natural phenomenon which we are not yet able to predict accurately. It is an earthquake. It can cause damage to human life and property on a huge scale.
An earthquake is a sudden shaking or trembling of the earth which lasts for a very short time. It is caused by a disturbance deep inside the earth's crust. Earthquakes occur all the time, all over

the earth. They are not even noticed. Major earthquakes are much less frequent. They can cause immense damage to buildings, bridges, dams and people. Earthquakes can cause floods, landslides and tsunamis. A major tsunami occurred in the Indian Ocean on 26 December 2004. All the coastal areas around the ocean suffered huge losses.



A typical seismograph record



Map of the earthquake

The power of an earthquake is expressed in terms of a magnitude on a scale called the Richter scale. The tremors produce waves on the surface of the earth. These are called seismic waves. The waves are recorded by an instrument called the seismograph. The instrument is simply a vibrating rod, or a pendulum, which starts vibrating when tremors occur.

(a) What do you mean by seismic waves? (1)
(b) What is seismograph and how it function? (1)
(c) What is the cause of earthquake? (1)
(d) What is tsunami and when it occurred? (1)