Science Class VIII

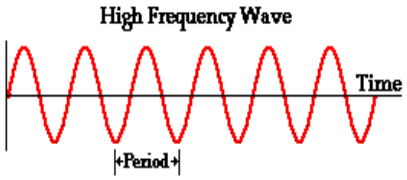
Practice Questions

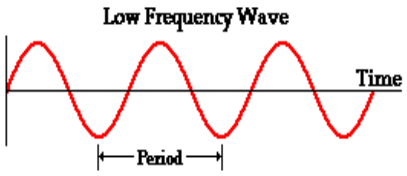
PHYSICS

Q.1 Explain working of a lightning conductor installed in the buildings. Draw an appropriate diagram.
Q.2 What is the resultant force when two forces act in the same direction?
Q.3 What is the resultant force when two forces act in the opposite direction on an object?
Q.4 Give an example where: -

a) A force moves a stationary body.
b) A force changes the speed of the moving body.
c) A force changes the direction of the moving body.

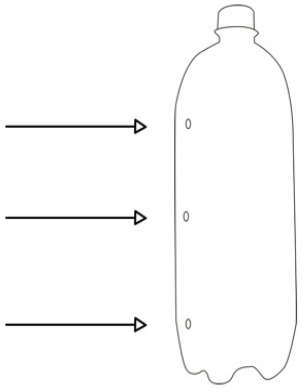
Q.5 What are seismic zones? Give examples of two areas that lie in these zones.
Q.6 A flat piece of wood and a wooden ball having same mass are placed on the same surface. If they are pushed with the same force turn by turn, which one of them will cover more distance? Why?
Q.7 Name the specialized shape of birds which help them to fly in the air. Identify the type of friction applied by the air to oppose their motion.
Q.8 Two forces of 16 N and 20N are acting on an object in the east direction while a force of 10N is acting on the same object but in the west direction. Find the net force acting on the object.
Q.9 Reena is walking on sand wearing heels. Will she be able to walk comfortably or not? Why or Why not?
Q.10 Arrange three types of friction in the increasing order of their magnitude.
Q.11 What are lubricants? Give two examples.
Q.12 Why our bodies are not crushed by large atmospheric pressure? Show the existence of the atmospheric pressure with an activity.
Q.13 Which of the sound waves shown below would be shriller and why?





Q.14 The roar of the lion is louder while the sound of a bird is shriller. Why?
Q.15 'Liquids exert equal pressure at the same depth'. Explain with the help of an activity. Support the answer with a suitable diagram.

Q.16 Name the point from which water comes out with maximum pressure. Name the point from which water covers the minimum distance.
Justify your choices.



Q.17 What conclusion do you draw on seeing fountains of water coming out of leaking joints or holes in pipes of main water supply?

CHEMISTRY

Q.1 Name the gas produced when a metal reacts with a hydrochloric acid. How will you test the gas?
Q.2 Copper reacts with air to form a green layer. What could be this green substance? Write complete equation of the above reaction.
Q.3 Complete the analogy:
Iodine: antiseptic**::** _____ : fertilizer**::** Chlorine:_____
Q.4 What is the full form of PCRA? Write any two tips suggested by PCRA.
Q.5 Study the following reactions:
Reaction X: $FeSO_4 + Cu \rightarrow$ _____
Reaction Y: $ZnSO_4 + Fe \rightarrow$ _____
Reaction Z: $CuSO_4 + Zn \rightarrow$ _____

a) Which of the above reaction will not take place? Justify.
b) Write the complete equation of the reaction which will occur.
c) Name the type of reaction. Define it also.
d) Arrange Cu, Zn and Fe in the increasing order their reactivity.

Q.6 Which fuel was used for street lighting in the 19th century in New York and London?
Q.7 Name the metal which fits in the following descriptions. Choose a different metal each time.

a) A metal which is galvanized using zinc and an important constituent of haemoglobin.
b) A metal that burns in oxygen with a dazzling white flame and is a part of chlorophyll.
c) Write word equation to show reaction of the two metals named in a) and b) with oxygen.

Q.8 Give reason :

a) Sodium is stored in kerosene.
b) Phosphorus is stored in water.
c) Petroleum is called black gold.

Q.9 What is carbonization?

Q.10 Name the constituent of petroleum which is used as a

a) Solvent for dry cleaning
b) Ointment
c) Fuel for home
d) Fuel for electric generators
e) Road surfacing

Q.11 Name three places in India where natural gas has been found.

Q.12 Reena dissolved a spoonful of rust in water and she obtained a solution. This solution was tested with red and blue litmus paper. What did she observe? Comment on the nature of the solution.

Q.13 Name the purest form of coal. Write two uses of coal.

BIOLOGY

Q.1 'P' is a biosphere reserve in Madhya Pradesh. It consists of a national park 'Q' and two wildlife sanctuaries.

a) Name P and Q.
b) Name two endemic flora of the place.

Q.2 Protected areas are important to conserve biodiversity. Name the three categories of protected areas and define each.

Q.3 Large scale deforestation leads to increase in the gas X in the air. The increased amount of Z leads to an increased heating of the earth's surface and ultimately to a phenomenon Y. Identify X and Y. How does deforestation lead to floods?

Q.4 Name the method of preserving

a) Amla
b) Fish
c) Jams
d) Milk

Q.5 Complete :

Nitrogen Fixation

↓

	Blue green algae/bacteria	

Q.6 Why we should avoid standing close to a tuberculosis patient while he/she is coughing?

Q.7 Identify the disease:

a) A disease spread by the bite of female *Aedes* mosquito.
b) A virus present in dirty water causes this disease, but it can be prevented by vaccination.
c) Plant disease caused by a fungus.

Q.8 Why the milk in a tetrapak does not get spoiled easily as compared to freshly collected cow's milk.

Q.9 'X' is a thread-like structure present in nucleus that appear at the time of cell division only. Identify X and state its function.

Q.10 Identify the cells from the given description and the questions:

Cell	Characteristic feature
A	Pseudopodia
B	Long branched cell in human body
C	Spindle shaped
D	Contains haemoglobin

a) Identify unicellular cell from A, B, C and D.
b) Draw each of these cells.
c) Write importance of haemoglobin.

Q.11 Complete the analogy
Louis Pasteur **:** Fermentation**::** Edward Jenner **:**_____ **::**Robert Hooke**:**_____ **::** _____ **:** Penicillin.

Q.12 Natural sugars change into carbon dioxide and M in the absence of oxygen but in the presence of a fungus N. Identify M and N. Define the process involved.