

**Class VIII Session 2025-26**  
**Subject - Science**  
**Sample Question Paper - 8**

**Time Allowed: 3 hours**

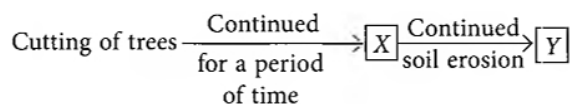
**Maximum Marks: 80**

### General Instructions:

1. The question paper consists of 34 questions and is divided into four sections, A, B, C and D.
2. All questions are compulsory.
3. Section A comprises question numbers 1 to 15. These are multiple choice questions carrying one mark each. You are to select one most appropriate response out of the four provided options.
4. Section B comprises question numbers 16 to 22. These are SAQs carrying two marks each.
5. Section C comprises question numbers 23 to 31. These are SAQs carrying four marks each.
6. Section D comprises question numbers 32 to 34. These are SAQs carrying five marks each.

## Section A

1. The chemical substances rich in particular nutrients are called [1]
  - a) fertilisers
  - b) composed matter
  - c) decomposed matter
  - d) manures
2. By spraying pesticides ruthlessly in the field we may: [1]
  - a) lose insect pollinators
  - b) gain new methods of agriculture.
  - c) increase cases of pollination
  - d) decrease chances of crop failure
3. Which one is not an inexhaustible natural resource? [1]
  - a) Natural Gas
  - b) Water
  - c) Soil
  - d) Sunlight
4. Which of the following substances will produce flame on burning? [1]
  - i. Candle
  - ii. Magnesium ribbon
  - iii. Charcoal
  - iv. Petrol
  - v. Camphor
  - vi. Paper
  - a) (iii), (iv) and (vi) only
  - b) (i), (ii), (iv), (v) and (vi) only
  - c) (i), (iii) and (vi) only
  - d) (i) and (iv) only
5. Refer to the given flow chart. [1]



- a) X is reforestation and Y is afforestation  
b) X is deforestation and Y is desertification  
c) X is desertification and Y is reforestation  
d) X is deforestation and Y is afforestation
6. Cessation of menstrual cycle in female is known as [1]  
a) Ovulation  
b) Parturition  
c) Menopause  
d) Menarche
7. Sex hormones are released by: [1]  
a) Testes only  
b) Ovaries and adrenal gland  
c) Testes and pituitary gland  
d) Testes and ovaries
8. Kicking a ball with our legs is an example of force of [1]  
a) magnetic  
b) friction  
c) gravitation  
d) muscular
9. A car with worn out treads on tyres is more likely to skid due to [1]  
a) Less friction  
b) Less weight of tyres  
c) More friction  
d) Smaller size of tyres
10. Which of the following is not a use of ultrasound? [1]  
a) Measuring depth of sea  
b) Diagnosis of liver ailments  
c) Detecting fault in bridges  
d) Killing germs of stomach
11. Which one of the following will not conduct electricity [1]  
Solid NaCl, CuSO<sub>4</sub> solution, Graphite, Acidified water  
a) Acidified water  
b) Graphite  
c) Solid NaCl  
d) CuSO<sub>4</sub> solution
12. In Japan cyclone is known as [1]  
a) Typhoon  
b) Thunderstorm  
c) Storm  
d) Hurricane
13. A person effected by colour blindners feels problem to identify which two colours? [1]  
a) Green & Red  
b) White and Yellow  
c) Green & Violet  
d) Black & Blue
14. State whether the given statement is True or False: [1]  
Bison is an endemic fauna of Pachmarhi Biosphere Reserve.
15. State whether the given statement is True or False: [1]  
Friction between two surfaces can be increased by polishing the surfaces.

#### Section B

16. Differentiate between the following. [2]  
Bacilli and Spirillum.



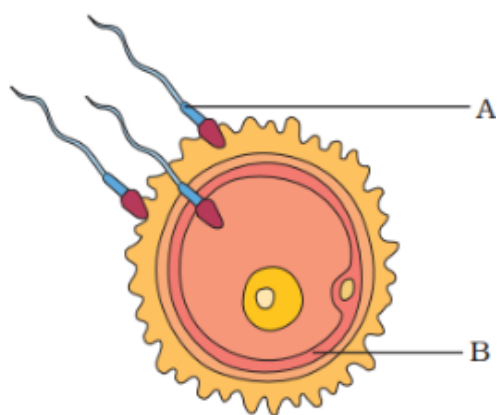
17. What are the properties of coke? [2]
18. The use of CNG, solar power and electricity to run automobiles will greatly reduce air pollution. [2]
19. How do the sex organs develop at puberty? [2]
20. How do human being hear the sounds? [2]
21. What do you mean by a strong electrolyte? [2]
22. What happens when light passes from one medium to another? [2]

### Section C

23. A crop of pulses does not require nitrogenous fertilisers. Give reason. [4]
24. While driving what are the tips we must follow to save petrol/diesel/natural gas? [4]
25. What are Sexually Transmitted Diseases? How can they be prevented? [4]
26. With the help of a flow chart explain that the onset of puberty is controlled by hormones? [4]
27. What is sphygmomanometer? [4]
28. A pendulum oscillates 40 times in 4 seconds. Find its time period and frequency. [4]
29. Why is it dangerous to handle electrical appliances with wet hands or while standing on a wet floor? [4]
30. What is a lightning rod? How it protects the buildings? [4]
31. How we can see non-luminous object? [4]

### Section D

32. Observe the figure given as figure and answer the questions that follow. [5]



- a. Label A and B.
  - b. Identify the process.
  - c. What happens during this process and what is formed?
33. Two women are of the same weight. One wears sandals with pointed heels while the other wears sandals with flat soles. Which one would feel more comfortable while walking on a sandy beach? Give reasons for your answer. [5]
  34. Explain the advantages of electroplating. [5]

# Solution

## Section A

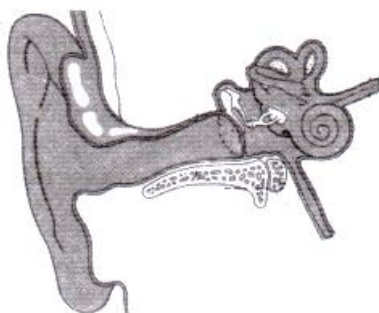
1. **(a)** fertilisers  
**Explanation:**  
fertilisers
2. **(a)** lose insect pollinators  
**Explanation:**  
Pesticides are used to kill the pests in agricultural field. These chemicals also kill the useful insect pollinators present in field.
3. **(a)** Natural Gas  
**Explanation:**  
The reservoir of natural gas is limited on earth and it can be used up completely.
4. **(b)** (i), (ii), (iv), (v) and (vi) only  
**Explanation:**  
Candle, magnesium ribbon, petrol, camphor and paper produce flame on burning.
5. **(b)** X is deforestation and Y is desertification  
**Explanation:**  
Continuous indiscriminate felling of trees in an area leads to deforestation. If the area is left barren, soil erosion continues leading to Loss of top fertile soil. This leads to desertification of that area.
6. **(c)** Menopause  
**Explanation:**  
Cessation of menstrual cycle in female is known as menopause. Menopause occurs at the age of about 50 years.
7. **(d)** Testes and ovaries  
**Explanation:**  
Sex hormones are released by testes in males called testosterone and in females by ovaries called progesterone and estrogen.
8. **(d)** muscular  
**Explanation:**  
muscular
9. **(a)** Less friction  
**Explanation:**  
A car with worn out treads on tyres is more likely to skid due to less friction. The treads in tyres produce more friction that prevents the vehicle from skidding by providing more grip on road.
10. **(d)** Killing germs of stomach  
**Explanation:**  
Killing germs of stomach



11. (c) Solid NaCl  
**Explanation:**  
Solid NaCl
12. (a) Typhoon  
**Explanation:**  
Cyclones a huge revolving storm caused by very high speed winds blowing around a central area of very low pressure in the atmosphere along with rainfall. A cyclone is called "typhoon" in Japan and Philippines.
13. (a) Green & Red  
**Explanation:**  
Most people with color blindness can't distinguish between certain shades of red and green. Less commonly, people with color blindness can't distinguish between shades of blue and yellow. Certain eye diseases and some medications also can cause color blindness.
14. (a) True  
**Explanation:**  
True
15. (b) False  
**Explanation:**  
False

### Section B

16. Bacilli are rod-like bacteria. Spirillum are spiral shaped bacteria.
17. 1. Coke is a hard and porous substance.  
2. Coke is a fuel with high carbon content and heat value.  
3. It produces little smoke while it burns.
18. The use of CNG, solar power and electricity in automobiles will greatly reduce air pollution. This is because these fuels produce little to no smoke or other air pollutants
19. At puberty, male sex organs like the testes and penis develop completely. The testes also begin to produce sperms. In girls, the ovaries enlarge and eggs begin to mature. Also, ovaries start releasing mature eggs.
20. The hearing organs in humans are. Ears have a stretched structure called eardrum. When ears receive sound, it enters down the ear canal and reach eardrum. Vibrations of sound vibrate the eardrum and it sends vibrations to inner ear from which vibrations are sent to brain for interpretation of sound.



Human ear.

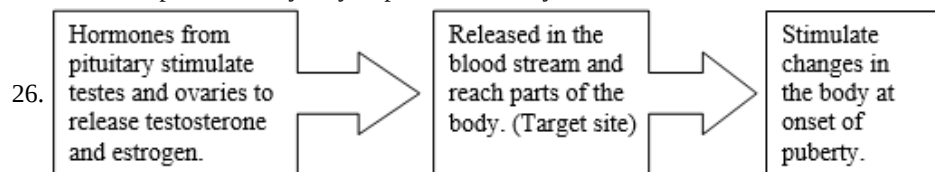
21. A strong electrolyte is a compound that ionises completely when dissolved in water. All its molecules break down to form cations and anions. Strong electrolytes are good conductors of electricity.
22. When light passes from one medium to another, it refracts.

### Section C

23. A crop of pulses consists of leguminous plants, which have the Rhizobium bacteria in their root nodules that can convert nitrogen in the air into nitrates. Hence, a crop of pulses does not require nitrogenous fertilisers.
24. The following tips we must follow to save petrol/diesel/natural gas as below:
- Ensure correct air pressure in the tires.



- ii. Ensure regular maintenance of the vehicle.
  - iii. Drive at a constant and moderate speed as far as possible.
  - iv. Switch off the engine at traffic lights or at a place where you have to wait.
25. The diseases spread only by sexual contact are called sexually transmitted diseases (STDs). When a healthy person contacts sexually to a person which is infected, then the microorganisms are transmitted from infected person to the healthy person and that becomes infected. Syphilis, gonorrhoea, herpes and AIDS are some sexually transmitted diseases. Herpes and AIDS are not curable diseases. These are fatal diseases, which destroy the immune system of the patient. Sexual hygiene and safe sexual relationship are the only way to prevent sexually transmitted diseases.



27. Blood pressure is measured using a device called sphygmomanometer or blood pressure monitor. It comprises an inflatable cuff to restrict blood flow and a mercury manometer to measure the pressure. It is always used along with a stethoscope.

28. Given that,

Number of oscillation = 40

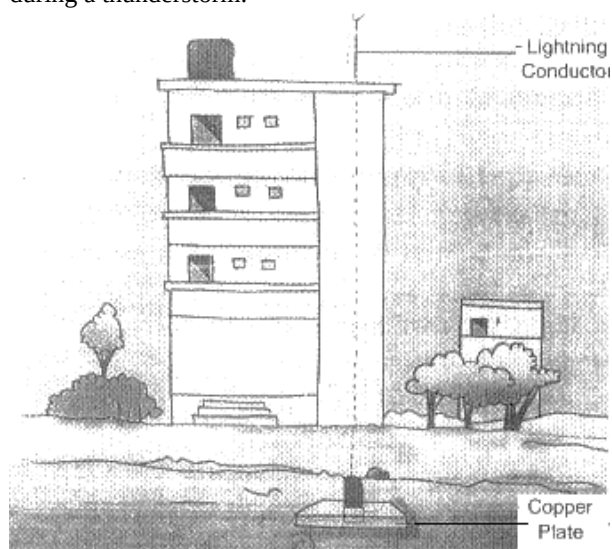
Total time taken = 4 seconds

Time period = time taken in one oscillation =  $\frac{\text{Total time}}{\text{Total number of oscillation}} = \frac{4 \text{ second}}{40} = \frac{1}{10} \text{ second} = 0.1 \text{ second}$

Again, frequency = number of oscillations per second =  $\frac{\text{Number of vibration}}{\text{Time taken}} = \frac{40}{4} \text{ second} = 10 \text{ per second} = 10 \text{ Hz.}$

29. Small amounts of mineral salts are present naturally in water. They are beneficial for human health. However, these salts make water conducting as such if we touch an electrical appliance with wet hands or while standing on a wet floor, current will flow through our body and result will be an electric shock.
30. Lightning rod is a device used to secure tall buildings from the effect of lightning. A metallic rod taller than the height of the building to be protected is installed in the walls of the building during its construction. One end of the rod is kept out in the air and the other is fixed in the ground. This provides easy route for transfer of electric discharge to the ground. Several such rods would be required to safeguard a building with a large area.

The metal columns used during construction and wiring and plumbing also give protection to an extent. But do not touch them during a thunderstorm.



Lightning conductor

31. The non-luminous object can be seen only when light coming from a luminous object falls on them. This light is reflected by the non-luminous objects in all directions. And when this reflected light enters our eyes, we can see the non-luminous object. This is because to us light appears to be coming from the non-luminous objects. Thus we can see the non-luminous object. Because they reflect light received from a luminous object into our eyes.

#### Section D

32. i. i. A - human male gamete, sperm  
ii. B - human female gamete - egg cell/ovum
- ii. The process has shown is of fertilization, where the male gametes or sperms have reached the female gamete or ovum, and one of the sperms is ready for fertilization.



- iii. During the process of fertilization, there is a fusion of the nucleus of the male gamete (sperm) with the nucleus of a female gamete (ovum), inside the female body. This results in the formation of a zygote, which will further develop into a fetus.
33. The woman wearing sandals with flat soles will feel more comfortable while walking on the sandy beach because the sandals with flat soles have a larger area as compared to the pointed heels. As we know that pressure is inversely proportional to the area. Hence, the larger the area, the smaller will be the pressure. Therefore, the pressure exerted by the sandals having flat soles will be less. On the other hand, the pressure exerted by the pointed heels will be more. That's why walking with flat soles will be more comfortable.
34. The advantages of electroplating:
- (i) It is used to coat a desired metal on other objects.
  - (ii) It protects the metals from corrosion.
  - (iii) It also prevents the metallic surfaces from rusting.
  - (iv) Some cheap and dull metals are coated with costly and shiny metals.
  - (v) It can make more reactive metals like iron, less reactive.
  - (vi) Coating of chromium on metals give luster to objects.

