

Class VIII Session 2025-26
Subject - Science
Sample Question Paper - 3

Time Allowed: 3 hours

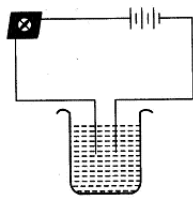
Maximum Marks: 80

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

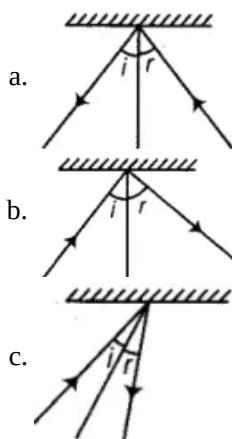
- | | | |
|----|---|---|
| 1. | The science of improving crop varieties is called | [1] |
| | a) Selection | b) Introduction |
| | c) Hybridization | d) Plant breeding |
| 2. | Nostoc and Volvox are | [1] |
| | a) Algae | b) Protozoa |
| | c) Bacteria | d) Fungi |
| 3. | Natural gas is a fossil fuel because | [1] |
| | a) it is an exhaustible natural resource. | b) it is a non-renewable natural resource. |
| | c) it is found in the earth's crust. | d) it is formed from dead remains of organisms. |
| 4. | Which of the following represents the characteristics of a good fuel? | [1] |
| | a) Low calorific value and low ignition temperature | b) High calorific value and high ignition temperature |
| | c) Low calorific value and high ignition temperature | d) High calorific value and low ignition temperature |
| 5. | The species, which is going to become extinct due to the lack of proper care would be called | [1] |
| | a) fauna | b) flora |
| | c) extinct | d) endangered |
| 6. | The faulty functioning of an endocrine gland can make a person very short or very tall. This gland is | [1] |



22. State the laws of reflection. [2]

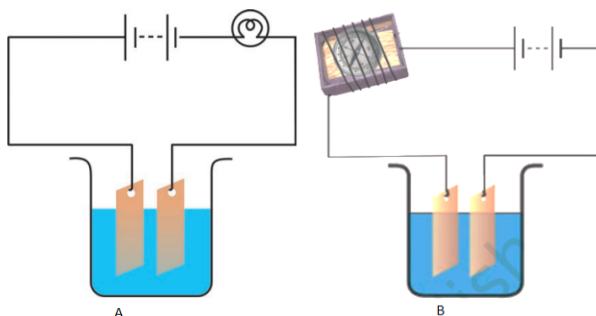
Section C

23. Why an appropriate distance between the seeds while sowing is important? [4]
 24. What do you mean by natural resources and man-made resources? [4]
 25. Mother gives birth to a baby but the baby has characters of both parents. How is this possible? [4]
 26. What are the secondary sexual characters in girls? [4]
 27. It is much easier to burst an inflated balloon with a needle than by a finger. Explain. [4]
 28. What is frequency range for human ear? What is audible and inaudible sounds? [4]
 29. What is deplating? How is it useful? [4]
 30. Draw a well labelled diagram of structure of the earth. [4]
 31. There is a mistake in each of the following ray diagrams given as a figure a, b, and c. Make the necessary correction (s). [4]



Section D

32. What is fertilization? Explain the different types of fertilization with example. [5]
 33. Give reasons: [5]
 a. School bags should have wider straps.
 b. A sharp knife cuts better than a blunt knife.
 34. Observing that the bulb does not glow in the circuit shown in figure A, Boojho changed the circuit as shown in figure B. He observed deflection in the magnetic compass. [5]



- i. What does the deflection in the magnetic compass indicate?
 ii. Why did the bulb not glow in figure A?

- iii. What would be the effect of the increase in the number of turns in the coil wound around the magnetic compass in figure B?
- iv. What will be observed if the number of cells are increased in the circuit shown in fig B?



Solution

Section A

1.
(d) Plant breeding
Explanation:
Plant breeding
2. **(a)** Algae
Explanation:
Algae
3.
(d) it is formed from dead remains of organisms.
Explanation:
Natural gas is formed from fossils(dead remains) of organisms.
4.
(d) High calorific value and low ignition temperature
Explanation:
High calorific value and low ignition temperature
5.
(d) endangered
Explanation:
endangered
6.
(d) pituitary
Explanation:
pituitary
7.
(b) Thyroxin
Explanation:
Metamorphosis in frogs is controlled by thyroxin hormone. Metamorphosis is a drastic change in the shape of organisms as a tadpole to frog.
8.
(c) It increases the area of contact, decreasing pressure.
Explanation:
Cushion gives us comfort to sleep on, because it increases the area of contact, and decreasing pressure.
9.
(b) stone
Explanation:
Stone will exert more friction and reaction which helps to sharpen the blade of the knife.



10. **(c) Amplitude**
Explanation:
 Amplitude
11. **(c) Cathode**
Explanation:
 Since metals from the electrolyte is deposited at cathode, the sample which is likely to be electroplated, has to be used as cathode.
12. **(a) Tsunami, Floods, Landslide**
Explanation:
 Earthquake can cause Tsunami, Floods and Landslide. When the lithospheric plates moves, the surface of the earth vibrates. The vibrations can travel all round the earth. These vibrations are called earthquake.
13. **(d) 5m**
Explanation:
 5m
14. **(a) True**
Explanation: True
15. **(a) True**
Explanation:
 True

Section B

16. Microorganisms are also used in cleaning up of the environment. The organic wastes like vegetable peels and remains of animals are broken down into harmless and usable substances by the action of microorganisms. In agriculture they are used to increase soil fertility by fixing nitrogen and by making manure.
17. i. Coal is a natural occurring substance whereas Coke prepared material with few impurities and high Carbon content, usually made from Coal.
 ii. Coal has a Volatile matter content whereas Coke has relatively very low Volatile matter content which suits it for a better fuel.
18. **Harmful effects of using more fuels:**
 (i) Carbon fuels like wood, coal and petroleum release unburnt carbon particles. These fine particles create respiratory disorders and diseases like asthma.
 (ii) Incomplete combustion of these fuels gives carbon monoxide. It is very harmful gas and causes respiratory disorders. It can kill persons sleeping in that room.
 (iii) Excessive use of fuels causes global warming.
 (iv) They cause acid rain which is harmful for crops, buildings and soil.
19. (i) Everyone should have a bath daily because increased activity of sweat glands makes the body smelly.
 (ii) Girls should take special care of cleanliness during the time of menstrual flow.
20. The vibrating objects produce sound. In some cases the vibrations are easily visible to us. But in most of the cases, the vibrations are not visible due to very small amplitude. But the vibrations in all the cases can be felt.
21. Tap water, sodium chloride solution, hydrochloric acid, lemon juice, vinegar.
22. Laws of reflection:
 i. The angle of incidence is always equal to the angle of reflection.
 ii. The incident ray, the reflected ray and the normal to the surface at the point of incidence lie in the same plane.

Section C

23. **Sowing of seeds:** One of the important part of crop production is sowing. Good quality seeds are selected and are sown in prepared soil with the help of various tools like traditional tools and seed drill. In order to avoid overcrowding of plants it is very



important to leave some space between two seeds. This also allows plants to get sufficient sunlight, nutrients and water from the soil. Otherwise the seed may compete for water and sunlight to grow. In this way some of the seeds may die.

24. Natural resources are the materials present in nature that are useful to human beings like air, water, soil, minerals, sunlight etc.

Man-made resources are the materials which is made by man such as plastic, glass, rayon, synthetic, rubber etc.

25. In the first step of reproduction, there is a fusion of the male and the female gametic nuclei. In this, the nucleus of the male gamete, sperm, fuses with the nucleus of the female gamete, the egg cell. As the nuclei carry genes, which result in the expression of characters, the zygote resulting from such fertilization, possesses both male and female characters.

26. In girls, breasts begin to develop at the time of puberty. These features help us to distinguish the male from the female. These characters are called secondary sexual characters. Hair grows under the arms and in the region above the thighs or the pubic regions in girls.

27. It is much easier to burst an inflated balloon with a needle than by a finger because the pressure is inversely proportional to the area of cross-section. Hence, the smaller the area, the larger will be the pressure.

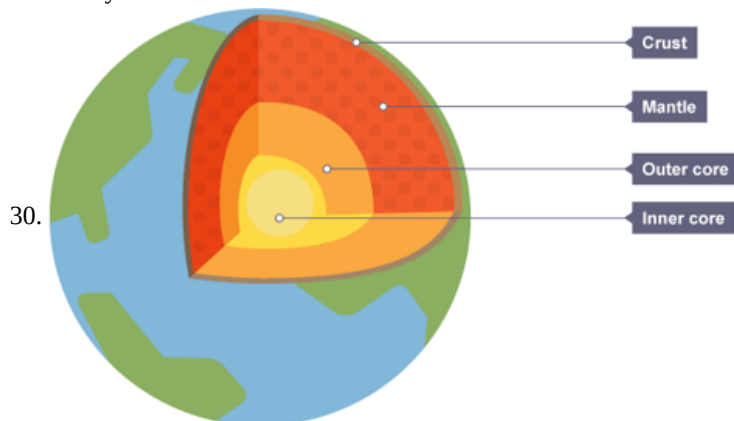
The needle has a smaller area of contact compared to the finger. Thus, the needle will exert more pressure on the balloon. Larger pressure by needle burst an inflated balloon.

28. The range of human ear is between **20Hz to 20000Hz**.

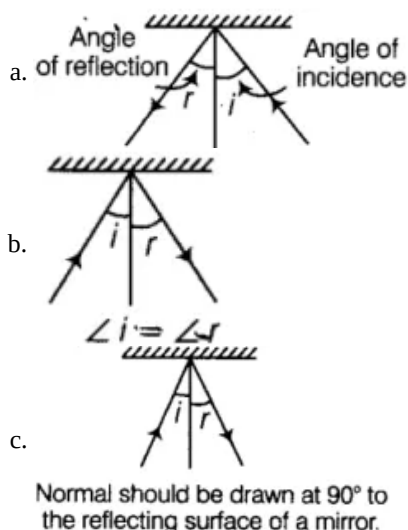
The sound frequency between this range is called **audible sound**.

The sounds having frequency less than 20 Hz is known as **inaudible sounds**.

29. The process just opposite to electroplating is deplating. In this process, the object to be deplated is used as the anode (positively charged electrode) and the recovered metal is deposited on a cathode (negatively charged electrode) usually of the same metal. To recover gold and other valuable metals from the circuits of computers, mobiles, other electronic goods, the process of deplating is very useful.



31. The correct diagrams are as given below:



Section D

32. The fusion of male gamete with a female gamete to form a zygote during sexual reproduction is called fertilisation..

The first step in the process of reproduction is the fusion of a sperm and an ovum.

During fertilization nuclei of the sperm and the egg fuse to form a single nuclei.

The different types of fertilization are as follows:-

- **Internal fertilization:-** fertilization which takes place inside the female body. It usually occurs in animals including humans and cows etc.
 - **External fertilization:-** fertilization which takes place outside the female body. Usually in this case lots of gametes are released at a time. Usually occurs in frogs etc.
33. a. A school bag should have wider straps so that the weight of the bag fall over a large area of the shoulder of the child which will produce less pressure on the shoulder of the child. Hence it would be comfortable for the child to carry a heavy bag.
- b. A sharp knife has a very thin edge to its blade. It cuts better because due to its very thin edge, the force exerted by our hands will fall over a very small area of the object producing a large pressure that cuts the object easily.
34. i. It shows that current is present in the circuit.
- ii. The bulb didn't glow as the current required was less than the current flowed in the circuit.
- iii. In the magnetic compass, the deflection will increase.
- iv. In the magnetic compass, the deflection will keep increasing.

