

Class VIII Session 2025-26
Subject - Science
Sample Question Paper - 6

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

- Other than fungi, and bacteria, which other soil organisms make the soil fertile? **[1]**
 - Slugs
 - Snails
 - Caterpillars
 - Earthworm
- Which is communicable disease? **[1]**
 - Haemophilla
 - Cholera
 - Allergy
 - Cancer
- Which one is true about coal tar? **[1]**
 - It is a black, thick liquid with an unpleasant smell.
 - It is a black, thick liquid with an unpleasant smell with a mixture of 200 substances.
 - It is a black, thick liquid with a pleasant smell.
 - It is a mixture of 200 substances.
- A person after fire casualty is wrapped with blanket to: **[1]**
 - to cut the supply of carbon dioxide
 - to increase the ignition temperature of body
 - to cut the supply of combustible substance
 - to cut oxygen supply
- National parks protect whole sets of ecosystems, while wildlife sanctuaries provide protection to _____. **[1]**
 - Wild flora
 - Wild fauna and flora
 - Fauna, flora and landscape
 - Wild animals
- Which of the following animals show metamorphosis? **[1]**

- ## Section B

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20. What is ektara? Identify its vibrating part. [2]
21. Paheli had heard that rainwater is as good as distilled water. So she collected some rainwater in a clean glass tumbler and tested it using a tester. To her surprise she found that the compass needle showed deflection. What could be the reasons? [2]
22. (1) The objects which emit the light is called _____ objects. [2]
(2) Plane mirror forms only a _____ image of an object.
(3) When two mirrors are set parallel to each other then they form _____ images of an object.

Section C

23. Compare the different methods of irrigation. [4]
24. Write the names of various components of petroleum and write their uses. [4]
25. The term metamorphosis is not used while describing human development. Why? [4]
26. How does the teenage brain's ability to learn impact personal growth? Suggest proactive methods for maximizing cognitive development during adolescence, considering education, social interactions, and extracurricular activities. [4]
27. Two thermocol balls held close to each other move away from each other. When they are released, name the force which might be responsible for this phenomenon. Explain. [4]
28. How do bats catch their prey? [4]
29. Purification of metals is possible through electrolysis. Describe this application. [4]
30. How can you save yourself from lightning? [4]
31. Why does white light disperse into light of seven colours? [4]

Section D

32. Explain binary fission in amoeba? [5]
33. Define electrostatic force. Why it is called a non contact force? Explain by giving examples. [5]
34. Demonstrate that lemon juice is a weak conductor of electricity. [5]



Solution

Section A

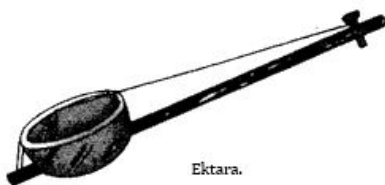
1.
(d) Earthworm
Explanation:
Earthworm
2.
(b) Cholera
Explanation:
Cholera
3.
(b) It is a black, thick liquid with an unpleasant smell with a mixture of 200 substances.
Explanation:
Coal tar is a black, thick liquid with an unpleasant smell. It is a mixture of 200 substances.
4.
(d) to cut oxygen supply
Explanation:
A person after fire casualty is wrapped with blanket to cut oxygen supply. Cutting of oxygen supply extinguish the fire due to absence of support of combustion.
5.
(d) Wild animals
Explanation:
National parks protected whole sets of ecosystems, while wildlife sanctuaries provide protection to wild animals. It is an area where animal habitats and their surroundings are protected from any sort of human disturbance. The capturing and killing are strickly prohibited in these regions.
6.
(c) Butterfly
Explanation:
Butterfly
7. **(a)** Both Progesterone and Oestrogen
Explanation:
Both Progesterone and Oestrogen
8.
(b) Friction
Explanation:
Wheels of vehicle is stopped by using brake that works on property of friction. We deliberately increase friction by using brake pads in the brake system and arrest the motion of the rim and finally the wheel, which helps in slowing and stopping the vehicle.
9. **(a)** It will be easier to push the box on the Moon than on the Earth.
Explanation:

Larger the weight, more difficult it will be to push a luggage i.e., frictional force will be greater. As on Moon, gravity is less, therefore weight is less hence frictional force is less.

10. **(b)** Both Intensity of sound and Rhythmic pattern in note
Explanation:
Music has rhythmic pattern in note and its intensity is generally low.
11. **(a)** chromium
Explanation:
chromium
12. **(a)** Induction
Explanation:
Induction
13. **(d)** Blind spot
Explanation:
Blind spot is a point on the retina where the nerve fibres from the retina are connected to the brain. So, it is insensitive to visual stimulus.
14. **(b)** False
Explanation: False
15. **(a)** True
Explanation: True

Section B

16. Pseudopodia are the false feet seen in some protozoa. Cilia are hair-like structures that help some protozoa move.
17. Coal is black in colour and hard as stone. It is one of the fuels used to cook food. Earlier it was used in railway engines to produce steam to run the engine. It is used as fuel in thermal power plants to produce electricity and in various other industries.
18. When CO_2 is released by the reaction of sulphuric acid sodium bicarbonate solution comes out in form of foam with a steam of liquid water at high pressure. Water puts off the fire by lowering the temperature of the combustible material below its ignition temperature and carbon dioxide cuts off the supply of air to the combustible substances, and the fire is controlled.
19. The various changes that occur into girls at the time of puberty are
- (a) hair growth in the armpits and pubic region.
 - (b) development of mammary glands or breasts.
 - (c) onset of menstruation cycle due to production of eggs or ova by the ovaries.
 - (d) increased oil secretion in the skin.
20. Take a hollow coconut shell or an earthen pot and make a musical instrument. Such instrument is called ektara. Play this instrument, you hear a sound. The stretched rubber band or a wire is its vibrating part.



21. Though rainwater is as pure as distilled water yet it may be contaminated by the impurities suspended in the atmosphere. These impurities make the rainwater conducting. This could be the reason for the deflection of compass.
22. (1) Luminous
(2) Single
(3) numerous

Section C

23. **Traditional methods**
Use diesel, electricity, biogas or solar energy to operate the pumps. Cattle or human labour is also used to lift water. Soil fertility is



reduced as the land remains flooded for some time after being watered. Some of the plant nutrients percolate with the water deep into the soil.

The pulley and the Rahat systems are some traditional methods of irrigation.

Modern methods

Use pipes or rotating nozzles to supply water directly to the plants at regular intervals. These do not reduce soil fertility because there is no flooding. There is hardly any loss of water due to evaporation or run off.

Drip irrigation and sprinkler system of irrigation are some modern methods of irrigation.

24. The petroleum is the mixture of various fractions. These fractions are separated by the process of refining:

We get following fractions by the process of refining:

(1) LPG (Liquefied Petroleum Gas):

Uses: It is used as domestic and industrial fuel.

(2) Petrol:

Uses: It is used as motor fuel, aviation fuel and solvent for dry cleaning.

(3) Kerosene:

Uses: It is used as fuel for stoves, lamps and for jet aircraft.

(4) Diesel:

Uses: It is used as fuel for heavy motor vehicles and electric generators.

(5) Lubricating Oil:

Uses: It is used as a lubricant.

(6) Paraffin Wax:

Uses: It is used in making ointments, candles and vaseline etc.

(7) Bitumen:

Uses: It is used in making paints and road surfacing.

25. The term metamorphosis is used to describe a process of development of an organism, where the young ones differ drastically in physical appearance from their adult forms. The body parts of an adult are absent in the young ones. Instead, some other and different body parts may be present.

In humans, the body structure of a young one is similar to that of an adult human. All body parts and organs of an adult are present in a child also. Thus, it is not called metamorphosis.

26. During adolescence, the brain's ability to learn significantly impacts personal growth. To maximize cognitive development during this critical period, individuals should engage in education, social interactions, and extracurricular activities. Deliberate practice and continuous learning are essential for achieving personal goals and fostering lifelong development.

27. Electrostatic force is the force which might be responsible for this phenomenon because:

- i. The electrostatic force is the force that is produced when charge bodies come together.
- ii. It is given that two thermocol balls have similar charges.
- iii. As we know that similar charges repel each other.
- iv. Hence, they move away from each other due to the repulsion between them.

28. Bats locate and catch the prey by the mechanism called echolocation. During the hunting time, the bats produce a constant stream of high-pitched sounds. When the sound waves produced by them hits an insect or other animal, the echoes bounce back to the bat that guides them to the prey. The time interval between cry and echo helps to determine the distance of the prey.

29. Purification of metals can be done by electrorefining where metals are refined by electrolytic method. For example: copper, silver, nickel, gold, aluminium etc purified through electrorefining. The purified metal after electrolysis deposits at the negatively charged electrode i.e. the cathode and is collected from time to time.

30. Some safety measures are:

- i. We should run to take shelter in the house.
- ii. We should remain in the covered area.
- iii. We should not sit in open, on scooters or bike etc.
- iv. We should take shelter under a small tree while in open.
- v. If there is no tree or other shelter we should sit with head folded.
- vi. We should plug out all the electrical appliances during lightning.
- vii. We should not use wired telephones during lightning. Mobiles and cordless phones are safe.





Safe position during lightning.

31. Light travels in a straight line. A ray of white light that falls on a glass prism does not continue to move along the original path after it enters the prism. The path of the ray bends. This is known as refraction. The path of light changes as it passes from one medium to another. The colours in white light are separated because the glass bends each colour component (rays) of the white light differently.

Section D

32. The type of asexual reproduction in which an animal reproduces by dividing into two individuals is called as the binary fission. It is usually found in single celled organisms such as “AMOEBA”.

It begins the process of reproduction by the division of its body into two nuclei.

This is followed by division of its body into two each part receiving a nucleus.

Finally two daughter amoeba are produced from one parent amoeba.

33. The force exerted by the electrically charged object is called electrostatic force.

The electrostatic force can be exerted by a charged body on another body even from a distance when they are not in contact with each other, hence it is also called a non contact force.

For example, when a plastic comb is rubbed on dry hair and brought near the tiny pieces of paper, we will see that the tiny papers are attracted towards the comb. It is due to the electrostatic force exerted by the electric charges acquired by the comb.

34. Collect a few small plastic or rubber caps of discarded bottles and clean them. Pour one teaspoon of lemon juice or vinegar in one cap. Bring your tester over this cap and let the ends of the tester dip into lemon juice or vinegar. Take care that the ends are not more than 1 cm apart but at the same time do not touch each other. When an electric current is passed through vinegar or lemon juice, the bulb glows very dimly which indicates that though vinegar and lemon juice conduct electricity but they are weak conductors of electricity.

