



INDIAN SCHOOL SOHAR
TERM I EXAMINATION (2023-24)
SCIENCE

CLASS: VIII
DATE: 26/09/2023

MAX. MARKS: 80
TIME: 3 HOURS

General Instructions:

This question paper consists of 39 questions in 5 sections.

All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.

Section A consists of 20 objective type questions carrying 1 mark each.

Section B consists of 6 very short questions carrying 02 marks each. Answers to these questions should be in the range of 30 to 50 words.

Section C consists of 7 short answer type questions carrying 03 marks each. Answers to these questions should be in the range of 50 to 80 words.

Section D consists of 3 long answer type questions carrying 05 marks each. Answer to these questions should be in the range of 80 to 120 words.

Section E consists of 3 source-based/case-based units of assessment of 04 marks each with sub-parts.

SECTION – A

Select and write one most appropriate option out of the four options given for each of the questions 1 - 20

1. Ramesh wishes to restore the nutrients in the soil of his field without spending money on chemical fertilizers. Which natural method he should adopt for replenishment of soil nutrients? 1
 - (a) Sowing seeds that are healthy.
 - (b) Growing the same crops every year.
 - (c) Growing different leguminous crops alternatively.
 - (d) Supplying water to crops at regular interval.
2. A student mixes some maida flour with water and sugar. He also adds small amount of yeast powder in the mixture. After two hours, he saw that the dough had risen. What caused the dough to rise? 1
 - (a) The division of yeast cells and production of gas.
 - (b) The reaction of maida flour with sugar.
 - (c) The release of energy by yeast cells after consumption of maida flour.
 - (d) The release of heat due to enlargement of yeast cells
3. Fertilization results immediately in the formation of: 1
 - (a) a zygote (b) an embryo (c) an egg (d) a foetus
4. The hormone which is associated with puberty in females is: 1
 - (a) Estrogen (b) Adrenaline (c) Testosterone (d) Insulin
5. Under what conditions does coal formation take place from the plant and animal remains? 1
 - (a) High temperature and high pressure (b) High pressure and cold surroundings
 - (c) Low pressure and high temperature (d) Low pressure and cold surroundings
6. A student lists some conditions that promote fire. What step can be taken to prevent materials from catching fire? 1
 - (a) Use oxygen cylinders to put off the fire.
 - (b) Put cotton clothes over the combustible material.
 - (c) Pour liquids such as kerosene over the combustible materials.
 - (d) Use water to lower the ignition temperature of the combustible materials.

7. Regions with more trees experience less soil erosion. How do the trees reduce soil erosion? 1
 (a) The roots of the trees hold the top layer of the soil firmly.
 (b) The trees absorb more sun rays which increases soil density.
 (c) The trees store extra food in the soil which increases the soil content.
 (d) The trees add dead leaves into the soil which increases the soil quantity
8. Which of the following is not a Kharif crop? 1
 (a) Paddy (b) Mustard (c) Maize (d) Groundnut
9. The first antibiotic called Penicillin was extracted from, 1
 (a) a bacterium (b) a protozoan (c) a fungus (d) an alga
10. The information which can be obtained from the Red book data. 1
 (a) Record of all endangered species
 (b) Information of all endemic species
 (c) Categorization of plants and animals according to species
 (d) Information of all plant and animal species of the country
11. Why do goldsmiths blow the outermost zone of a flame to melt gold and silver? 1
 (a) Because it is the least hot (b) Because it has unburnt wax vapors
 (c) Because supports partial combustion (d) Because it supports complete combustion
12. Coal is exhaustible in nature because it is made of, 1
 (a) different minerals fused together.
 (b) natural gas processed over millions of years.
 (c) wood obtained from forests that takes years to grow.
 (d) dead and decayed animals and plants sedimented over millions of years
13. The characteristic which defines a pathogen. 1
 (a) They can spoil food and plastic. (b) They make soil fertile.
 (c) They can infect a human body. (d) They breakdown remains of dead organisms.
14. A farmer grows crop in an arid region where there are no lakes and very little rainfall. During summers, the low availability of water limits crop production. Name the irrigation method he should adopt to use water economically. 1
 (a) Drip system (b) Lever system (c) Pulley system (d) Sprinkler system
15. Pimples and acne are formed due to the increased activity of: 1
 i. adrenal gland ii. sebaceous glands iii. thyroid gland iv. sweat gland
 (a) i and ii (b) ii and iii (c) i and iii (d) ii
16. _____ is NOT a viviparous animal? 1
 (a) Rat (b) Pigeon (c) Rabbit (d) Cat

Q. no 17 to 20 are Assertion - Reasoning based questions.

These consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A.
 (b) Both A and R are true and R is not the correct explanation of A.
 (c) A is true but R is false.
 (d) A is False but R is true

17. **Assertion(A):** Acne and pimple are very common among adults. 1
Reason(R): This is due to increased production of sweat from sweat glands.
18. **Assertion (A) :** Microorganisms help in cleaning the environment. 1
Reason (R) : Microorganisms decompose dead organic waste of plants and animals and convert them into simple substances.

19. **Assertion (A):** The substances which vaporize during burning do not produce flame. 1
Reason (R): Carbon dioxide is the best extinguisher for fires involving electrical equipment.
20. **Assertion(A):** Migratory birds fly to far away areas every year during a particular time because of climatic changes. 1
Reason (R): They fly for laying eggs as the weather in their natural habitat becomes very cold and In hospitable.

SECTION – B

Q. no. 21 to 26 are very short answer questions

21. While returning from school Raju ate chaat from a street vendor. When he reached home, he felt ill and complained of stomach ache. 2
(a) What is the name given to this condition?
(b) What causes this condition?
22. (a) What would happen if fresh crop is stored without drying and why? 2
(b) Name the practice followed for large scale rearing of farm animals.
23. In an experiment 6 kg of coal was completely burnt. The heat produced was measured to be 42000 kJ. Calculate the calorific value of the fuel. 2

(OR)

Wood has a very high calorific value; we still discourage its use as a fuel. Explain.

24. What is metamorphosis? Give two examples of organisms showing metamorphosis. 2
25. List changes in the body that take place at puberty. (Any four) 2

(OR)

Discuss the importance of nutrition in the diet of an adolescent.

26. List any two tips given by PCRA to save fuel while driving 2

SECTION - C

Q.no. 27 to 33 are short answer questions.

27. The mosquito A is a carrier of virus and spreads a disease B. Another mosquito C is the carrier of protozoan D and spreads a protozoan disease E. 3
(a) Name the mosquito A, and disease B.
(b) Name the protozoan D, and the protozoan disease E.
(c) Mention any one measure which controls the disease caused by mosquito.
28. Despite favourable climatic conditions, a farmer's crop failed to give good yield. Give any three possible reasons for this. 3
29. Differentiate between internal fertilization and external fertilization with examples. 3

(OR)

Why does a female frog lay hundreds of eggs?

The eggs of frogs do not have shells for protection, yet they are safe in water. How?

30. What are the major products of petroleum refining? (any three) Give one use of each petroleum product. 3
31. (a) What will happen if the water in which tadpoles are growing does not contain sufficient iodine? 3
(b) Name the hormone which lowers the blood sugar level in humans?
(c) Name the gland which secretes this hormone.
32. What do you understand by 'endemic species'? Name two plant and two animal species that are endemic to Pachmari Biosphere Reserve area. 3

(OR)

Consider the following animal species:

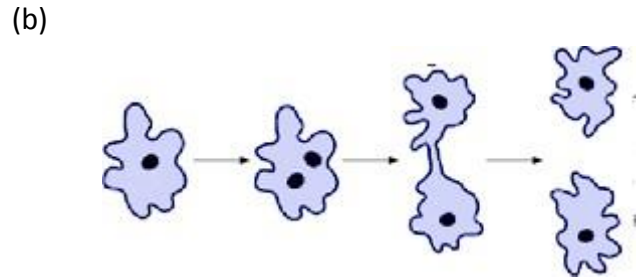
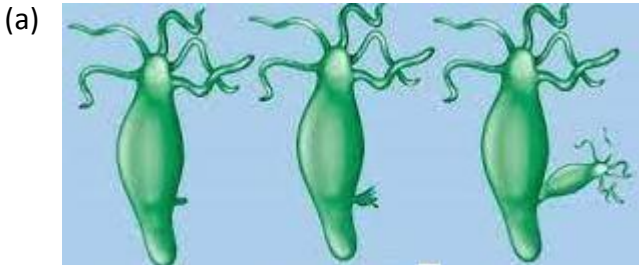
Dodo, Bison, Deer, Blackbuck, Tiger, Crow, Kashmir Stag, Elephant, Lion-tailed macaque, Peacock, Giant squirrel

Which of these animals are

- (a) Endemic to mountain habitats?
- (b) Endangered species?
- (c) Extinct species?

33. Observe the given diagrams carefully and identify the type of reproduction shown.

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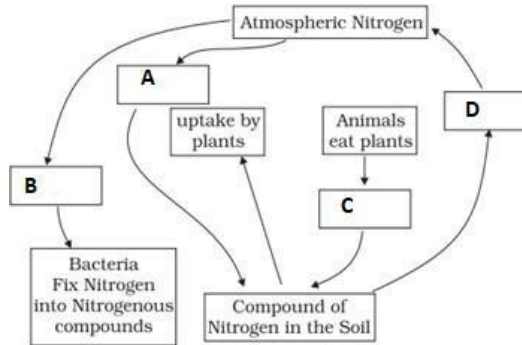
(c) Define the term asexual reproduction.

SECTION – D

Q.no. 34 to 36 are Long answer questions

34. Complete the following cycle by filling the blanks (A), (B), (C) and (D).

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Give reason for the following.

Farmers prefer to grow beans and peas in nitrogen deficient soil.

(OR)

Observe the figure and answer the questions that follow.



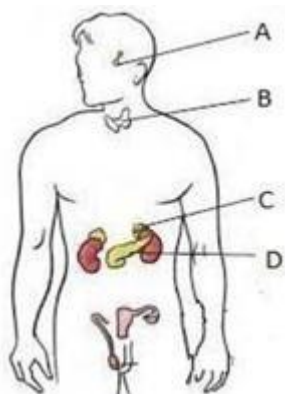
- (a) Write the name of the disease.
- (b) Name the causative agent of this disease?
- (c) How does this disease spread from one plant to another?
- (d) Name any two plant diseases and the microbes that cause them.

35. Indian paddy cultivation, deeply rooted in the country's agricultural heritage, plays a pivotal role in sustaining the nation's food security. With vast expanses of flooded fields, lush green paddies sway in the tropical breeze. Farmers labor tirelessly, transplanting rice saplings in muddy waters, a timeless ritual passed down through generations. 5

Yet, challenges persist. Farmers battle unpredictable weather patterns, water scarcity, and market fluctuations. Government initiatives strive to empower them with subsidies and knowledge, driving progress. As the sun sets over the rice fields, the essence of Indian paddy cultivation remains intertwined with the nation's cultural tapestry, sustaining millions and preserving traditions.

- (a) In which season is paddy cultivated?
- (b) What measures must be taken to prevent spoilage and insect attack of harvested grains. (any two)
- (c) Name one weedicide and the precaution farmers must take during its application.

36. (a) With suitable diagrammatic representation, explain how is the sex of a baby determined.
(b) Identify the labelled parts. 5



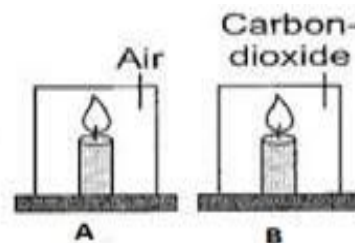
(c) List any two ways by which HIV gets transferred to a normal person from an infected person.

SECTION - E

Q.no. 37 to 39 are case - based/data -based questions with 2 to 3 short sub - parts. Internal choice is provided in one of these sub-parts.

37. Two glass jars A and B are filled with Oxygen and Carbon dioxide gases, respectively. In each jar alighted candle is placed simultaneously. 4

- (a) In which jar will the candle remain lighted for a longer time and why?
- (b) Define the term combustion. Give examples for gaseous fuel and solid fuel.



(OR)

(b) The calorific values of petrol and CNG are 45000 kJ/kg and 50,000 kJ/kg, respectively. If you have vehicle which can run on petrol as well as CNG. Which fuel will you prefer and why?

38. A 15-year-old boy, previously known for his high-pitched and squeaky voice, recently noticed a significant change in his vocal tone. His voice has deepened noticeably over the past few months, causing both excitement and anxiety as he navigates this transformative phase of adolescence. This sudden vocal alteration has led to teasing from his friends and questions from his family, making him curious about the science behind these changes and seeking advice on how to manage and adapt to his evolving voice.

4

- (a) What is the protruding part that develops in a boy's throat in adolescence?
- (b) Name the hormone which is responsible for the changes occurs in males during adolescence.
- (c) Mention the possible reason behind the high pitch voice in girls and low pitch voice in boys?

(OR)

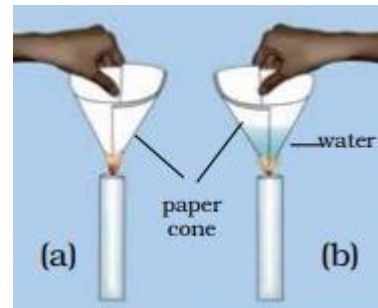
(c) Name the hormone which would be released during the following situations:

- (i) A frightened person.
- (ii) Growth of a child to adult.

39. Teacher was demonstrating a lab activity. For the activity, she made two paper cones(cups). She heated one empty paper cone on the candle flame and filled the other paper cone one-third with water and heated it on the flame.

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- (a) What might be the observations that the students noted after seeing the activity.
- (b) Name the factors which are necessary for combustion.



(OR)

(b) Name the products formed when coal burns in air.