

DAV PUBLIC SCHOOLS, ODISHA ZONE
QUESTION BANK
SUB : SCIENCE CLASS-VI (2023-24)
TEXT BOOKS : MY LIVING WORLD STD-VI
NCERT EXAMPLAR CLASS VI SCIENCE

EXAM SCHEDULE 2023-24

NAME OF THE EXAM	DATE	FULL MARKS
PERIODIC ASSESSMENT-I	24 July 2023to 31July 2023	40

Syllabus

CHAPTER	Periodic Assessment- I	Marks (40 Marks)
CHAPTER1	Our Environment.	15
CHAPTER2	Food	15
CHAPTER 3	Nature of matter	10

TYOLOGY OF QUESTIONS

1	VSA	1 MARK
2	ASSERTION AND REASON BASED QUESTIONS	1 MARK
3	SHORT ANSWER TYPE QUESTION-I	2 MARKS
4	SHORT ANSWER TYPE QUESTION-II	3 MARKS
5	LONG ANSWER TYPE QUESTIONS	5 MARKS
6	CASE BASED QUESTIONS	4 MARKS

Chapter- I Our Environment

VERY SHORT ANSWER TYPE QUESTIONS(1 Mark)

(A) .FILL IN THE BLANKS.

1. Non-living components of the environment, also known as_____.
2. The green colour substances present on the leaf surface, known as _____.
3. Those organisms feed on both producers as well as primary consumers, called _____.
4. _____ and _____ are the examples of decomposers.
5. Water is used for _____ and _____.
6. _____ and _____ are two cold living animals.
7. The process of who eats whom, known as _____.
8. We must say No to _____ bags.
9. _____ and _____ are Autotrophs.
10. _____ and _____ are non-biodegradable substances.

(B). ANSWER IN ONE SENTENCE.

11. List the abiotic components.
- 12 . Define photosynthesis.
13. Define scavengers.
14. List the biodegradable materials.
15. Name the compost making process of using redworms.
16. Define Rainwater harvesting.
17. List the animals living in the desert.
18. Define the food chain.
19. Name the device that measures temperature.
20. Name the animals, active during night.

ASSERTION-REASON TYPE QUESTIONS(1 Mark)

Assertion and Reason, Direction: In each of the question given below, there are two statements marked as Assertion(A) and Reason R .Mark your answer as per the codes provided below

- a) Both assertion and reason is true and reason is the correct explanation of assertion
- b) Both assertion and reason is true and reason is not correct explanation of assertion
- c) Assertion is true and reason is false
- d) Assertion is false and reason is true

21. Assertion - Plants are autotrophs.

Reason - Plants can prepare their own food.

22. Assertion - Leaves have chlorophyll.

Reason - Green plants use sunlight.

23. Assertion - Fungi and Bacteria are microorganisms.

Reason - They cannot see in their naked eyes.

24. Assertion - There should be a ban on the use of polythene bags.

Reason - Polythene is a biodegradable material.

25. Assertion - Rain water harvesting is the best way to store rainwater.

Reason - Cities and towns face Scarcity of rainwater.

26. **Assertion** - Crow, vultures Keep the environment clean.

Reason - They are Heterotrophs.

27. **Assertion** - Living organisms need air for growth and maintenance of life.

Reason - Many viruses, Bacteria are Present in the air.

28. **Assertion** - Buffaloes cooling themselves in pond during summer.

Reason - They don't have efficient sweat glands.

29. **Assertion** - Camels can live in desert.

Reason - Camels can tolerate high temperature.

30. **Assertion** - Very few plants can survive in deep water.

Reason - Plants shows response towards the light.

SHORT ANSWER TYPE QUESTIONS-I (2 MARKS)

31. Define photosynthesis.

32. Define Scavengers. List its examples.

33. Differentiate between autotrophs and heterotrophs.

34. Differentiate between biotic and abiotic components.

35. Explain the recycling of minerals.

36. Justify the statement - " Use of polythenes should be avoided".

37. Relate the use of chemical fertiliser with Vermicompost.

38. Illustrate the importance of rainwater harvesting.

39. Define Temperature.

40. Define the food chain.

SHORT ANSWER TYPE QUESTIONS-II (3 MARKS)

41. Differentiate between terrestrial and aquatic food chains.

42. State the importance of decomposers for the environment.

43. Differentiate between biodegradable and non-biodegradable materials

LONG ANSWER TYPE QUESTIONS (5 MARKS)

44. Suggest any five activities that can help to save the environment.

45. Draw the mineral cycle.

46. Describe the importance of air for the living organisms

(PARAGRAPH BASED QUESTIONS)

47. Green plants make their food themselves. On their leaf surfaces, there are some green colour pigment, called chlorophyll. Leaves are known as the kitchen or food factory of plants because photosynthesis takes place in leaves. Photosynthesis helps to maintain balance between oxygen and carbon dioxide in the atmosphere. Chlorophyll absorbs sunlight and gives energy. At the end of photosynthesis, carbohydrate and oxygen are formed.

Carbohydrate is used as food and oxygen is emitted out to the atmosphere.

I. Green colour pigment on leaf surface, is known as _____.

(i) Stomata (ii) Photosynthesis (iii) Chlorophyll (iv) Energy

II. _____ are known as kitchens of plants.

(i) Stem (ii) Plants (iii) Leaves (iv) Roots

III. _____ is emitted out to the atmosphere after photosynthesis.

(i) Oxygen (ii) Energy (iii) Carbon Dioxide (iv) Air

IV. _____ helps to maintain balance between oxygen and Carbon Dioxide.

(i) Stomata (ii) Photosynthesis (iii) Minerals (iv) Autotrophs

Chapter- II Food

VERY SHORT ANSWER TYPE QUESTIONS(1 Mark)

(A). Fill in the blanks

1. _____ are the primary source of energy for the body.
2. _____ are essential for building and repairing body tissues.
3. _____ provides insulation and energy to the body.
4. _____ are organic compounds that are essential for normal cell function.
5. _____ are inorganic substances that regulate body functions.
6. _____ is essential for life and helps to regulate body temperature.
7. The lack of some of the essential components of food in the diet is known as _____.
8. Eating a variety of _____ and vegetable is important for good health.
9. _____ provide important information about the nutritional value of foods.
10. Consuming too much _____ and fatty foods can lead to health problems.

(B). ANSWER IN ONE SENTENCE.

11. Components in food that we need to grow and survive.
12. Nutrients needed for growth and repair of damaged tissues.
13. Disease caused by deficiency of Vitamin C.
14. Vital nutrients required in Limited amount.
15. Nutrients needed in small amounts for growth and maintenance of the body.
16. Write the full form of PEM.
17. State the function of phosphorus.
18. Define pigeon –chest.
19. State the function of iodine.
20. Write the full form of PCM

ASSERTION-REASON TYPE QUESTIONS(1 Mark)

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- h) Assertion is false and reason is true

21. **Assertion:** A balanced diet is essential for good health.

Reason: A balanced diet provides all the necessary nutrients that our body needs.

22. **Assertion:** Junk food is unhealthy and can lead to various health problems.

Reason: Junk food is high in calories, sugar, and fat, and lacks essential nutrients.

23. **Assertion:** Fruits and vegetables are an important part of a healthy diet.

Reason: Fruits and vegetables are rich in vitamins, minerals, and fiber.

24. **Assertion:** A balanced diet consists of all the nutrients which are important for the proper growth and development of the body.

Reason: A balanced diet can be vegetarian or non-vegetarian.

25. **Assertion:** Drinking enough water is important for good health.

Reason: Water is essential for maintaining proper hydration, regulating body temperature, and flushing out toxins from the body. It helps to prevent dehydration, which can cause fatigue, headaches, and other health problems.

26. **Assertion:** Eating too much sugary and fatty foods can be harmful to health.

Reason: Sugary and fatty foods are high in calories and low in nutrients. Consuming too much of these foods can lead to weight gain, obesity, and an increased risk of chronic diseases, such as diabetes and heart disease.

27. **Assertion:** Food provide important information about the nutritional value of foods.

Reason: Food labels provide information about the calorie content, nutrient content, and taste of foods. This information can help people make informed choices about what they eat and can help them maintain a healthy diet.

28. **Assertion:** Green plants are preparing their own food by the process of photosynthesis.

Reason: Animals and human beings are independent for their food.

29. **Assertion:** Milk is considered a complete food.

Reason: Milk-giving animals are called milch animals.

30. **Assertion:** Iodine is needed for the synthesis of a hormone called thyroxin.

Reason: Thyroxin is produced by the thyroid glands.

SHORT ANSWER TYPE QUESTIONS-I (2 MARKS)

31. Why do we need food?

32. How food is obtained from plants?

33. How food is obtained from animals?

34. Write short notes on carbohydrate.

35. Describe the importance of protein in our food.

36. Why should we take fat in our diet?

37. Why do we need vitamins?

38. Why should we take balanced diet? Explain.

39. Describe a test for presence of starch in a food item. i.e. Rice.

40. What are the benefits of sitting in sunshine for our body?

SHORT ANSWER TYPE QUESTIONS-I (3 MARKS)

41. Name any three sources of food.

42. Deficiency of iodine is more common in mountainous regions. Why?

43. State the functions of vitamin A, Vitamin B & Vitamin C.

44. List any three importance of water.

45. Describe a test for presence of protein in a food item. i.e. Pulses.

LONG ANSWER TYPE QUESTIONS-I (5 MARKS)

46. Explain about the different types of major nutrients found in food? Give examples of foods that are rich in each type of nutrient.

47. Elaborate the importance of a balanced diet? State the consequences of a diet that is deficient in certain nutrients?

48. What are the different types of food borne illnesses? How can they be prevented? Describe in detail.

(PARAGRAPH BASED QUESTIONS)

49. John is a 10-year-old boy who loves to eat junk food. He often skips meals and snacks on chips, candy, and soda. His parents are worried about his health and want to encourage him to eat a healthier diet. They send John to his maternal uncle's house during Pujā vacation. His uncle explained the importance of balanced diet and consequences of junk food nicely. John realized his mistake and took all kinds of food in his lunch and dinner happily.

I. Which vitamin deficiency can lead to night blindness?

- a) Vitamin A b) Vitamin B c) Vitamin C d) Vitamin D

II. Which vitamin deficiency can lead to scurvy?

- a) Vitamin A b) Vitamin B c) Vitamin C d) Vitamin D

III. Which vitamin deficiency can lead to rickets?

- a) Vitamin A b) Vitamin B c) Vitamin C d) Vitamin D

IV. Which vitamin deficiency can lead to beriberi?

- a) Vitamin A b) Vitamin B c) Vitamin C d) Vitamin D

50. Ananya is a 12-year-old girl who is a vegetarian. She is concerned about getting enough protein in her diet and wants to know from her mother what foods she should eat to meet her nutritional needs during rapid growth and development of body in summer vacation.

I. Which mineral deficiency can lead to anemia?

- a) Iron b) Calcium c) Sodium d) Potassium

II. Which mineral deficiency can lead to goiter?

- a) Iron b) Calcium c) Sodium d) Iodine

III. Which mineral deficiency can lead to osteoporosis?

- a) Iron b) Calcium c) Sodium d) Iodine

III. Which food is called body building food?

- a) Carbohydrates b) Vitamins c) fat d) Protein

51. Rohan a student of Std: VI loves to eat junk food like burgers, pizzas, and fries. His mother is worried about his health and wants him to eat healthy food. She has started packing him nutritious snacks like fruits, nuts, and sandwiches for school. However, Rohan still insists on eating junk food.

I. Which deficiency disease is caused by a lack of iron?

- a) Scurvy b) Night blindness c) Anemia d) Rickets

II. Which food item is included in carbohydrate.

- a) egg b) bread c) fish d) meat.

III. Sterility is caused by deficiency of vitamin

- a) A b) B c) C d) E.

IV. The Vitamin helps in clotting of blood.

- a) K b) B c) D d) E

Chapter- III Nature of matter

VERY SHORT ANSWER TYPE QUESTIONS(1 Mark)

(A). **Fill in the blanks**

1. Solids have a fixed shape and a definite _____.
2. Light cannot pass through the _____ materials.
3. The rate of diffusion is fastest in _____ state of matter.
4. Chalk powder does not _____ in water.
5. Grouping of materials having similar properties is called _____.
6. We cannot see a candle which is placed at the opposite side of the wall because the wall is _____ in nature.
7. A piece of thermocole floats on water whereas a pebble _____ in water.
8. Polished marble has _____ appearance.
9. Materials which are _____ than water, generally float over it.
10. Materials which occur naturally are called _____ materials.

(B). **ANSWER IN ONE SENTENCE.**

11. Name the property of the matter which allows light to pass through them.



12. See the above picture and mention the property of matter shown.

13. In which state of matter, particles have very little hold on each other?



14. Name the gas which is coming out in the above glass.
15. Name the state of matter in which the particles are less tightly packed and can move a little.
16. Define the term diffusion.
17. 'A piece of wood floats on water whereas a coin sinks in it'. Give reason.
18. List two solids which are insoluble in water.
19. 'Sand and stones do not mix with each other'. Justify.
20. Define the terms: (i) solute and (ii) solvent.

ASSERTION-REASON TYPE QUESTIONS(1 Mark)

Assertion and Reason, Direction: In each of the question given below, there are two statements marked as Assertion(A) and Reason R .Mark your answer as per the codes provided below

- i) Both assertion and reason is true and reason is the correct explanation of assertion
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- k) Assertion is true and reason is false
- l) Assertion is false and reason is true

21. **Assertion:**Materials like plants and minerals are natural materials.

Reason : These materials are naturally found on earth.

22. **Assertion:** All the things that we see around us are made up of matter.

Reason : Grouping of materials having similar properties is known as classification.

23. **Assertion :** All the matter can be classified as solid, liquid and gas according to their chemical properties.

Reason : Matter is something which has mass and which occupies space.

24. **Assertion :** Cloud is an example of transparent object.

Reason: The property of a material to allow light to pass through it is called transparency.

25 **Assertion:**Solids have a definite shape and size.

Reason: The particles in solids are tightly arranged with out any space in between them.

26. **Assertion :**Gases do not have a fixed shape nor a definite volume.

Reason :In liquids particles are less tightly pack.

27. **Assertion :**The property by which a substance dissolves in another substance is called dissolution.

Reason :Water can dissolve a large number of substances in it.

28. **Assertion :**The solubility of a gas in water increases with increase in its temperature.

Reason :The solubility of a solid in water increases with increase in its temperature.

29. **Assertion:** Wood and iron are opaque materials.

Reason : These materials do not allow light to pass through them.

30. **Assertion:** Gases like oxygen and carbon dioxide dissolve in water.

Reason: Materials which are heavier than water, generally sink in it..

SHORT ANSWER TYPE QUESTIONS-I (2 MARKS)

31. Name the materials which are used to prepare soda water.
32. Define the term dissolution. Name two solids which are soluble in water.
33. Distinguish between transparent and opaque materials.
34. Differentiate between natural and synthetic materials giving one example from each type.
35. Write the importance of oxygen gas and carbon dioxide gas dissolved in water.
36. Classify the following into materials having lustre and those having no lustre.
Gold pendant, Jute bag, Leather sofa, Aluminium sheet
37. Select those materials from the following which float on water.
Sawdust, Iron nail, Cube of ice, Sand
38. Find the odd one out from the following.
Potassium permanganate, Vinegar, Mustard oil, Carbon dioxide
Give reason for your choice.
39. Give two examples each of materials which have smooth and rough texture.
40. Name two gases which are insoluble in water.

SHORT ANSWER TYPE QUESTIONS-I (3 MARKS)

41. Classify the following into transparent, translucent and opaque materials.
Cloud, Air, Blackboard, Glass, Butter Paper, Pebble
42. Briefly describe an activity to show that wood is an opaque liquid.
43. With the help of diagrams, show the particle arrangement in three states of matter.
44. Define solubility. Explain the effects of temperature on solubility of solids and gases.
45. Write any three properties on the basis of which matter can be classified.

SHORT ANSWER TYPE QUESTIONS-I (5 MARKS)

46. Define the term saturated solution. Write the steps to prepare a saturated solution of sugar in water.
47. (a) Write the three states of matter giving one example from each.
(b) Mention any two properties of liquids.
48. A, B and C are three liquids. A is used for cooking purposes and it is insoluble in water. B is used as a preservative in pickles and is soluble in water. C is used in pens and comes in different colours.
(a) Identify A, B and C.
(b) State whether C is soluble or insoluble in water.
(c) Write another liquid which is soluble in water.

(PARAGRAPH BASED QUESTIONS)

49. Anything that has mass is made up of matter – an all-encompassing word for atoms and molecules that make up our physical world. We describe this matter as existing in states (sometimes referred to as phases). Most people are familiar with three states of matter – solids, liquids and gases – but there are two more that are less commonly known but just as important – plasmas and Bose-Einstein condensates.

(i) They have a fixed shape and definite volume.

(a) solid (b) liquid (c) gas (d) both solid and gas

(ii) In this state of matter particles have very little hold on each other.

(a) liquid (b) gas (c) solid (d) both gas and solid

(iii) In this state of matter particles have definite volume but do not have a fixed shape.

(a) solid (b) liquid (c) gas (d) both solid and gas

- (iv) Particles are also called
(a) diffuse (b) atom (c) solute (d) solvent

50. Soluble solids are those solids that when mixed with the right liquid (solvent), form a solution. Hence, the soluble solids dissolve in the liquid (water, oil, kerosene, etc.). Eg: salt and water, sugar and water. Insoluble solids are those solids that do not dissolve in water.

- (i) In sugar solution solute is
(a) lemon juice (b) water (c) sugar (d) milk

- (ii) These are insoluble in water
(a) oxygen, wax (b) sand, petrol (c) iron, salt (d) milk, mercury

- (iii) These are soluble in water
(a) carbon dioxide, alcohol (b) diesel, clay
(c) sugar, petrol (d) salt, kerosene

- (iv) These gases are insoluble in water
(a) oxygen, carbon dioxide (b) oxygen, nitrogen
(c) helium, ozone (d) carbon dioxide, hydrogen

51. Solubility is the new bond formation between the solute molecules and solvent molecules. In terms of quantity, solubility is the maximum concentration of solute that dissolves in a known concentration of solvent at a given temperature. A saturated solution is a chemical solution that contains the highest bound solvent level. In a saturated solution, the extra solution will not dissolve. Depending on a multitude of variables, the quantity of fluid that can we can add in a solvent to create a saturated solution.

- (i) The maximum amount of a substance that can be dissolved in a given volume of a given liquid is called
(a) transparency (b) diffusion
(c) dissolution (d) solubility of a substance
- (ii) The solution in which more of the given substance cannot be dissolved at a given temperature is called
(a) soluble substance (b) insoluble substance
(c) suspension (d) saturated solution
- (iii) The solubility of a gas in water decreases with increase in its
(a) temperature (b) pressure (c) humidity (d) atmospheric pressure
- (iv) A saturated solution can be made using
(a) water, sand (b) milk, sugar
(c) iron, milk (d) soft drink, nickel