NO. SELD/CA/CW/18 /2018.
GOVERNMENT OF SINDH
SCHOOL EDUCATION & LITERACY DEPARTMENT
Karachi, dated the 17th, February, 2026.

To,

The Director,
Directorate of Curriculum, Assessment & Research (DCAR), Jamshoro.

SUBJECT: **SUBMISSION OF STANDARDIZED MODEL TEST PAPERS FOR GRADE-IV TO GRADE-VIII FOR THE ACADEMIC YEAR 2025-2026. (REQUEST FOR APPROVAL & DISSEMINITION).**

This letter is with reference to your letter No. DCAR/DIR/52/-2026, dated; 04th of February 2026 on the subject cited above.

Reference to the content of the letter as stated that the Directorate of Curriculum, Assessment & Research (DCAR), has developed the Standardized Model Test Papers for Grade IV to Grade-VIII, for the Academic Session 2025-2026 and for Local Annual Examinations 2026.

This is to inform that the competent authority has approved the request and permission is granted for dissemination of the developed Standardized Model Test Papers for Grade IV to Grade-VIII, to all Directorates of School Education of all regions of Sindh, for guidance and preparation of Standard Test Papers.

Your assistance with this matter is highly valued.

Dr. Fouzia Khan
Chief Executive Advisor (Curriculum Wing)
School Education and Literacy Department
Government of Sindh.

A copy is forwarded for information to: -

1. The P.S to Minister for Education, Govt. of Sindh.
2. The P.S to Secretary, School Education & Literacy Department, Govt. of Sindh.
3. The Office File.

Directorate of Curriculum, Assessment & Research Sindh, Jamshoro
Model Paper 2025-26

TABLE OF CONTENTS

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1. TABLE OF SPECIFICATIONS (TOS)

Grade VI: Table of Specification

Content Area	MCQs	CRQs	ERQs	Total Items	Weightage
Life Science	08	06	3	17	40%
Physical Science	08	06	3	17	40%
Earth & Space Science	04	03	1	08	20%
Total	20	15	07	42	100%

Grade V: Table of Specification

Content Area	MCQs	CRQs	ERQs	Total Items	Weightage
Life Science	08	06	3	17	40%
Physical Science	08	06	3	17	40%
Earth & Space Science	04	03	1	08	20%
Total	20	15	07	42	100%

2. MODEL QUESTION PAPERS

GRADE IV

Directorate of Curriculum, Assessment & Research Sindh, Jamshoro

Model Paper 2025-26

Time: 3 hours **Subject: G.Science** **Total Marks: 100**

Name of Student: _____ S/D/O _____ Gender: (Boys/Girls) _____

Medium: _____ School Name: _____

Taluka: _____ City/Village: _____ Signature of Invigilator: _____

SECTION A: MULTIPLE CHOICE QUESTIONS (MCQs) ***time: 20 minutes***

Instructions: Attempt all questions. Each question carries 2 Marks. (Total: 40 Marks)

1. Which of the following is not a type of inherited characteristic?

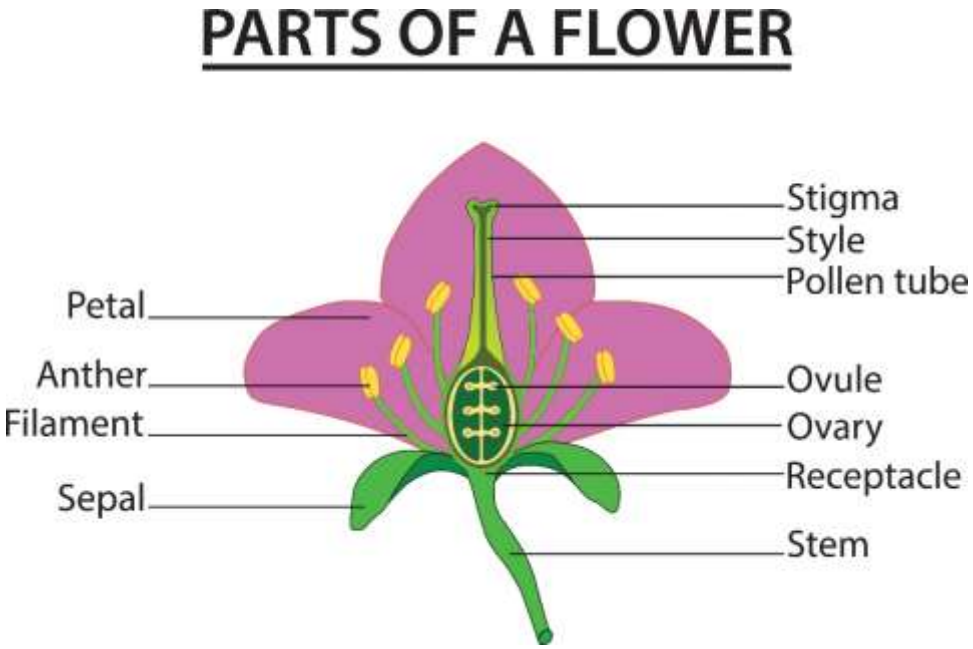
(a) Your name (b) Face shape (c) Hair color (d) Eye color

2. The taste of nectar is:

(a) Sour (b) Bitter (c) Sweet (d) Salty

3. Pollination is a process of transferring pollen grains to:

(a) Anther (b) Leaves (c) Petal (d) Stigma Shutterstock



4. Biotic component deals with the study of:

(a) Living things (b) Non-living things (c) Temperature (d) Nutrition

5. Vitamins which strengthen our bones, teeth and also prevent a disease called Rickets is:

(a) A (b) B complex (c) D (d) C

6. The group of food called balanced food is:

(a) Peas, Apple, Burger (b) Carrot, Mango, Milk (c) Fish, Yogurt, Cold drink

(d) Bread, Chocolate, Sweets

7. The number of primary teeth in an adult is:

(a) 20 (b) 22 (c) 32 (d) 30

8. Our physical characteristics are determined by the characteristics of our:

(a) Neighbors (b) Relatives (c) Parents (d) Friends

9. The unit of frequency is:

(a) Newton (b) Hertz (c) Joule (d) Watt

10. Magnet attract materials made up of:

(a) Iron (b) Plastic (c) Paper (d) Wood

11. An inclined plane wrapped around a cylinder used to fasten objects is called a:

(a) Screw (b) Pulley (c) Wheel (d) Lever

12. The amount of space that an object occupies is called:

(a) Mass (b) Volume (c) Weight (d) Material

13. Which of the following is made up of two or more substances that are mixed together but not combined together chemically?

(a) Mass (b) Solution (c) Mixture (d) Solute

14. Sound occurs when particles of air:

(a) Change their shape (b) Heat up (c) Slow down (d) Vibrate

15. One of the properties of matter is:

(a) No mass but occupies space (b) Mass but occupies no space (c) Mass and occupies space

(d) No mass and occupies no space

16. The 3 parts of an electric circuit are:

(a) Cell, Connector, Bulb (b) Cell, Connector, Switch (c) Load, Connector, Energy source (d) Load, Wire, Connector

17. In which direction does the Earth rotate on its axis?

(a) East to West (b) West to East (c) South to North

(d) North to South

18. The word "alpine" is used for:

(a) Desert (b) Forest (c) Hills

(d) Mountain

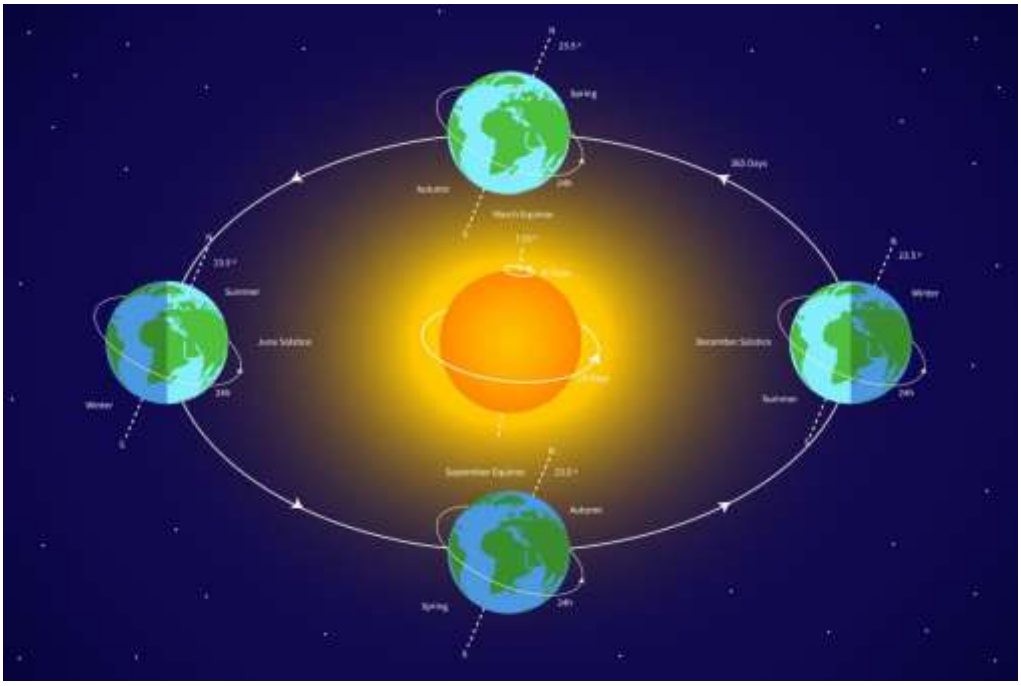
19. Which animal has the ability to survive with little water in a desert environment?

(a) Snake and Crocodile (b) Camel and Cactus (c) Polar bear and Penguins

(d) Cactus and Penguins

20. The path along which the Earth travels around the Sun is called:

(a) Shell (b) Axis (c) Orbit (d) Circumference



SECTION B: CRQs (Attempt 10 questions, each question carries 4 marks) (40 Marks)
Time: 100 minutes

Q.NO: 1.Define the terms Producers, Consumers, and Decomposers.

Q.NO: 2. List any four inherited characteristics found in humans.

Q.NO: 3.Describe what the human heart is made of and explain why it is important for the body.

Q.NO: 4.Why is a "balanced diet" considered essential for a person's health?

Q.NO: 5.How do the physical features of a camel and a cactus help them survive in a desert?

Q.NO: 6.Draw and label the life cycle of a Bean plant.

Q.NO: 7.Enlist five materials that will be attracted to a magnet.

Q.NO: 8.State the three states of matter and provide one example for each.

Q.NO: 9.Differentiate between a Conductor and an Insulator and provide examples for both.

Q.NO: 10.Describe how sound occurs in relation to the particles of air.

Q.NO: 11.Explain the difference between an Open circuit and a Closed circuit.

Q.NO: 12.Describe a simple machine (such as a Screw) and give three different uses for simple machines in daily life.

Q.NO: 13.Define the term "orbit" and explain its relationship to the Earth and the Sun.

Q.NO: 14.In which direction does the Earth rotate on its axis, and how does this create day and night?

Q.NO: 15.Demonstrate how the Earth travels on path around the Sun differs from the rotation on its own axis.

SECTION C: EXTENDED RESPONSE QUESTIONS (ERQs) Time*:* 60 minutes

Instructions: Attempt any 4 questions out of 7. Each question carries 05 Marks. (Total: 20 Marks)

Q.NO: 1. Complete the following table by explaining what each food group does for the body and providing two examples for each. Then, identify which group is most important for muscle growth and explain why?

Food Groups	**What it does for the body?**	**Examples**
Proteins		
Carbohydrates		
Fats and Oil		
Vitamins and Minerals		

Q.NO: 2.Describe the structure of the human heart and explain why it is vital for the survival of the human body?

Q.NO: 3. Define the roles of Producers, Consumers, and Decomposers within an ecosystem. Draw and label the complete life cycle of a Bean plant from seed to maturity.

Q.NO:4.Describe the concept of a "Simple Machine" in detail. Provide three different examples of simple machines (such as a screw, lever, or pulley).

Q.NO: 5. Explain the process of how sound occurs through the vibration of air particles. And differentiate between "Sound" and "Noise".

Q.NO: 6. Differentiate between a Conductor and an Insulator by explaining how they interact with electricity, providing examples for each.

Q.NO: 7. Explain the difference between the Earth's rotation on its axis and its orbit around the Sun.

Directorate of Curriculum, Assessment & Research Sindh, Jamshoro
Model Paper 2025-26

GRADE V

Time: 3 hours **Subject: G.Science** **Total Marks: 100**

Name of Student: _____ S/D/O _____ Gender: (Boys/Girls) _____
Medium: _____ School Name: _____
Taluka: _____ City/Village: _____ Signature of Invigilator: _____

SECTION A: MULTIPLE CHOICE QUESTIONS (MCQs) ***Time: 20 minutes***

Instructions: Attempt all questions. Each question carries 2 Marks. (Total: 40 Marks)

1. The following characteristics is unique to all mammals:

(a) They can fly

(b) They lay eggs

(c) They have hair or fur

(d) They live only on land

2. A scientist finds a new organism that lives both on land and in water, and has moist, smooth skin. How should this organism be classified?

(a) Reptile

(b) Fish

(c) Mammal

(d) Amphibian

3. What is the primary function of gills in a fish?

(a) To help the fish swim faster

(b) To absorb oxygen from water

(c) To protect the fish from predators

(d) To digest food

4. Why are some bacteria considered "probiotic" or beneficial to humans?

(a) They cause diseases like the flu

(b) They help in digestion and improve gut health

(c) They are visible to the naked eye

(d) They prevent plants from growing

5. If a person wants to prevent the spread of pathogenic viruses in a classroom, which action would be most effective?

(a) Turning off the lights

(b) Regular handwashing and sanitizing surfaces

(c) Increasing the room temperature

(d) Closing all the windows

6. Which group of organisms is defined as being "pathogenic"?

(a) Those that produce oxygen

(b) Those that cause diseases

(c) Those that are used to make bread

(d) Those that provide nutrients to soil

7. A plant seed with two cotyledons is known as a:

(a) Monocot

(b) Dicot

(c) Spore

(d) Fungus

8. Which of the following best explains why reptiles can live in very dry deserts while amphibians usually cannot?

(a) Reptiles breathe through their skin

(b) Reptiles have scales and lay eggs with shells to prevent drying out

(c) Amphibians are faster than reptiles

(d) Reptiles do not need any water to survive

9. Which state of matter has a definite volume but takes the shape of its container?

(a) Solid

(b) Liquid

(c) Gas

(d) Plasma

10. You place an ice cube on a hot sidewalk and it turns into a puddle of water. This change of state is called:

(a) Freezing

(b) Condensation

(c) Melting

(d) Evaporation

11. A carpenter is building a wall and needs a material that light cannot pass through. Which should he choose?

(a) Clear Glass

(b) Transparent Plastic

(c) Thick Wood

(d) Clean Water

12. What is the standard unit used to measure force?

(a) Kilogram

(b) Meter

(c) Liter

(d) Newton

13. When you push a heavy box across the floor, in which direction does the force of friction act?

(a) In the same direction as the push

(b) In the opposite direction of the motion

(c) Upward toward the ceiling

(d) Downward toward the center of the Earth

14. If you are designing a vehicle to travel to the moon, why is the speed of light a significant factor in space communication?

(a) It is the slowest way to send signals

(b) It is the fastest possible speed for sending data

(c) It only works inside the Earth's atmosphere

(d) It cannot pass through a vacuum

15. Which of the following is an example of a gas?

(a) Iron

(b) Mercury

(c) Oxygen

(d) Silver

16. Imagine you have three containers: one filled with pebbles (solid), one with honey (liquid), and one with smoke (gas). Which container's contents will expand to fill the entire space if the lid is opened?

(a) The pebbles

(b) The honey

(c) The smoke

(d) None of them

17. Which of the following is considered a major greenhouse gas responsible for trapping heat in the atmosphere?

(a) Oxygen

(b) Nitrogen

(c) Carbon Dioxide

(d) Argon

18. A farmer notices that water drains away too quickly from his crops, leaving the roots dry. Which type of soil does he likely have?

(a) Clay

(b) Sandy

(c) Loamy

(d) Silt

19. To reduce air pollution in a city, which of the following actions would be most helpful?

(a) Burning more coal for electricity

(b) Cutting down old forests for housing

(c) Replacing gasoline cars with electric vehicles powered by wind energy

(d) Building more factories without filters

20. Which of these is a direct consequence of increased air pollution?

(a) Increased soil fertility

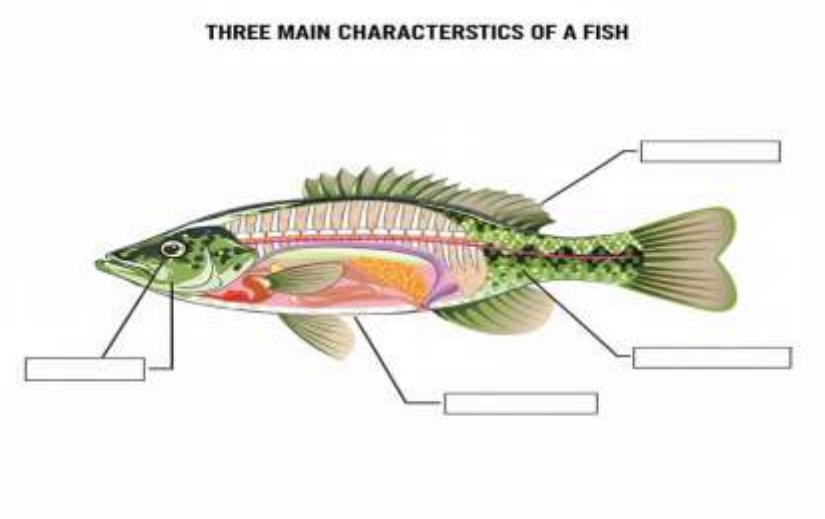
(b) Higher rates of respiratory diseases like lung cancer

(c) Improved visibility for pilots

(d) More drinkable water in rivers

B: CRQs (Attempt 10 questions, each question carries 4 marks) (40 Marks)
Time: 100 minutes

Q1. List three physical characteristics of fishes that help them live in water.

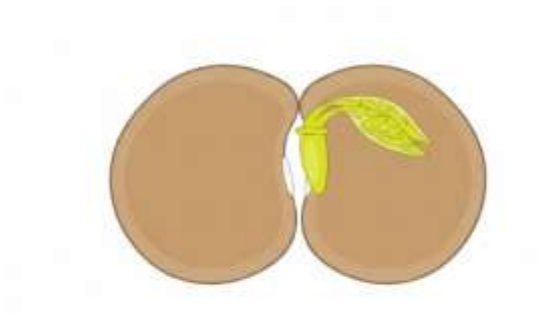


Q2. A scientist finds a new creature and needs to classify it. How would the scientist distinguish if the animal is an Amphibian or a Reptile based on its skin and eggs?

Q3. Imagine a farmer wants to grow bean seeds but the soil is completely dry and the weather is freezing. Explain why the seeds will not germinate and name the missing conditions.

Q4. While both are microorganisms, give one major structural difference that distinguishes a Virus from a Bacteria.

Q5. Label and describe the function of three main parts of a bean seed.



Q6. If a person is diagnosed with an "infection," what is actually happening inside their body in terms of microorganisms?

Q7. Define Solid, Liquid, and Gas based on their volume and shape.

Q8. Why does a puddle of water disappear faster on a hot sunny day than on a cold cloudy day? Explain the change of state involved.

Q9. A stage designer needs to create a "shadow" effect. Should they use a transparent, translucent, or opaque object to block the light completely? Justify your choice.

Q10. Explain how friction helps a student write with a pencil on paper. What would happen if there was zero friction?

Q11. List three disadvantages of friction in a car engine and suggest one way to reduce it.

Q12. What is a Pinhole Camera, and how does it demonstrate that light travels in straight lines?

Q13. Define the planet Mercury and explain why its surface temperatures are so extreme (very hot and very cold).

Q14. What is pollution? Provide one example of air pollution and one example of water pollution.

Q15. You are tasked with reducing the "Greenhouse Effect" in a local city. Based on your knowledge of pollution, which three specific human activities would you change to improve the air quality?

SECTION C: EXTENDED RESPONSE QUESTIONS (ERQs) Time*:* 60 minutes

Instructions: Attempt any 4 questions out of 7. Each question carries 05 Marks. (Total: 20 Marks)

Q1. Describe the three main layers of soil and explain how the presence of organic matter (humus) affects the growth of living organisms within it.

Q2. Compare and contrast how different types of pollution (Air, Water, and Land) impact the survival of plants and animals in an ecosystem.

Q3. You are designing a sustainable community garden. Based on your knowledge of soil characteristics and pollution, what three specific measures would you implement to ensure the soil remains healthy for long-term food production?

Q4. Define an "Inclined Plane" and a "Wedge." How does the design of these simple machines help us perform work more easily in daily life?

Q5. Explain the scientific process of how lightning occurs during a storm. In your answer, describe the role of static electricity and the movement of charges.

Q6. Imagine you need to move a heavy crate onto a truck and split a thick log of wood. Identify which simple machine (inclined plane or wedge) you would use for each task and explain why.

Q7. Describe the Solar System by naming the central star and the eight planets in order. Briefly explain why the planets stay in orbit rather than drifting away into space.

GRADE IV - KEY AND MARKING SCHEME

MCQs Key

1. **(a) Your name** (Inherited traits are biological; names are social)
2. **(c) Sweet**
3. **(d) Stigma** (Pollination is the transfer of pollen grains to the stigma)
4. **(a) Living things** (Biotic components are the living parts of an ecosystem)
5. **(c) D** (Vitamin D strengthens bones and prevents Rickets)
6. **(b) carrot, mango, milk** (This selection provides a balance of essential nutrients)
7. **(c) 32** (Standard number of permanent teeth in an adult)
8. **(c) Parents** (Physical characteristics are inherited from biological parents)
9. **(b) Hertz**
10. **(a) iron**
11. **(a) screw** (An inclined plane wrapped around a cylinder)
12. **(b) Volume** (Definition of space occupied by an object)
13. **(c) Mixture** (Substances mixed but not chemically combined)
14. **(d) vibrate**
15. **(c) Mass and occupies space** (Standard properties of matter)
16. **(c) load, connector, energy source**
17. **(b) West to East**
18. **(d) Mountain**
19. **(b) Camel and cactus**
20. **(c) orbit**

Marking Scheme for CRQs

Q. No.	Question	Marking Criteria	Marks Breakup	Total Marks
1	Define Producers, Consumers, and Decomposers.	Correct definitions for all three roles in an ecosystem.	Producers (1.5), Consumers (1.5), Decomposers (1).	**04**
2	List any four inherited characteristics found in humans.	Identify traits passed from parents.	1 mark for each correct trait (e.g., Eye colour, Hair colour).	**04**
3	Describe the human heart composition and importance.	Identify the material of the heart and its role in the body.	Composition/Muscle (2), Importance/Pumping blood (2).	**04**
4	Importance of a "balanced diet."	Explain what it consists of and its health benefits.	Contains food groups (2), Energy/Growth benefits (2).	**04**
5	Survival of camel and cactus in the desert.	Explain biological adaptations for water conservation.	Camel adaptation (2), Cactus adaptation (2).	**04**
6	Draw and label the life cycle of a Bean plant.	Visual representation of growth stages with correct terminology.	Drawing (2), Labeling stages (2).	**04**
7	Enlist five materials	List specific metals or objects	0.8 marks for each correct material (e.g., Iron, Steel).	**04**

	attracted to a magnet.	influenced by magnetic force.		
8	Three states of matter and examples.	Name the states and provide real-world instances.	Naming states (2), One example for each (2).	**04**
9	Conductor vs. Insulator.	Contrast the ability of materials to allow electrical flow.	Conductor + example (2), Insulator + example (2).	**04**
10	How sound occurs in relation to air particles.	Explain the mechanical process of sound transmission.	Vibration of object (2), Movement of air particles (2).	**04**
11	Open vs. Closed circuit.	Describe the path of electricity in different states.	Open circuit/broken path (2), Closed circuit/complete path (2).	**04**
12	Simple machines (Screw) and daily uses.	Define a specific simple machine and its utility.	Definition/Description (2), Three daily life uses (2).	**04**
13	Define "orbit" and its relationship.	Define the space path and identify the objects involved.	Definition of Orbit (2), Earth/Sun relationship (2).	**04**
14	Rotation direction and Day/Night.	Identify planetary movement and its result on light.	Direction/West to East (2), Day/Night process (2).	**04**
15	Orbit path vs. Rotation axis.	Differentiate between spinning and traveling through space.	Rotation on axis (2), Path around the Sun (2).	**04**

Marking Scheme for ERQs

Q. No.	Question	Marking Criteria	Marks Breakup	Total Marks
1	Complete the following table by explaining what each food group does for the body and providing two examples for each. Then, identify which group is most important for muscle growth and explain why?	Complete the table for four groups and identify the muscle-building group.	**Table:** 0.5 per cell (Total 3 marks). **Muscle Growth:** Identify Proteins (1) and explain growth/repair (1).	**05**
2	Describe the structure of the human heart and explain why it is vital for the survival of the human body?	Describe the composition/structure and the vital role it plays.	**Structure:** Made of muscle/four chambers (2). **Importance:** Pumping blood to provide oxygen/nutrients (3).	**05**
3	Define the roles of Producers, Consumers, and Decomposers within an ecosystem. Draw and label the complete life cycle of a Bean plant from seed to maturity.	Define three ecosystem roles and provide a labeled diagram.	**Definitions:** Producers, Consumers, Decomposers (2). **Diagram:** Labeled stages of Bean plant (3).	**05**
4	Describe the concept of a "Simple Machine" in detail. Provide three different examples of simple machines (such as a screw, lever, or pulley).	Detailed concept of simple machines and three specific examples.	**Concept:** Makes work easier by changing force/direction (2). **Examples:** 1 mark each for three examples (3).	**05**
5	Explain the process of how sound occurs through the vibration of air particles. And differentiate between "Sound" and "Noise".	Explain sound production via particles and the difference from noise.	**Process:** Vibration of air particles explained (2).	**05**

			Difference: 3 points of difference (pleasant/unpleasant, etc.) (3).	
6	Differentiate between a Conductor and an Insulator by explaining how they interact with electricity, providing examples for each.	Contrast electrical interaction and provide real-world examples.	**Interaction:** Allows vs. blocks electrical flow (3). **Examples:** 1 mark for each correct set of examples (2).	**05**
7	Explain the difference between the Earth's rotation on its axis and its orbit around the Sun.	Differentiate between spinning on an axis and traveling in space.	**Rotation:** Axis movement/24 hours/Day-Night (2.5). **Orbit:** Path around Sun/365 days/Seasons (2.5).	**05**

GRADE V - KEY AND MARKING SCHEME

Answer Key of MCQs

1. **(c)** They have hair or fur
2. **(d)** Amphibian
3. **(b)** To absorb oxygen from water
4. **(b)** They help in digestion and improve gut health
5. **(b)** Regular handwashing and sanitizing surfaces
6. **(b)** Those that cause diseases
7. **(b)** Dicot
8. **(b)** Reptiles have scales and lay eggs with shells to prevent drying out
9. **(b)** Liquid
10. **(c)** Melting
11. **(c)** Thick Wood
12. **(d)** Newton
13. **(b)** In the opposite direction of the motion
14. **(b)** It is the fastest possible speed for sending data
15. **(c)** Oxygen
16. **(c)** The smoke
17. **(c)** Carbon Dioxide
18. **(b)** Sandy
19. **(c)** Replacing gasoline cars with electric vehicles powered by wind energy
20. (b) Higher rates of respiratory diseases like lung cancer

Marking Scheme for CRQs

Q. No.	Question Topic	Marking Criteria	Marks Breakup	Total
1	**Characteristics of Fish**	List 3+ physical traits for water life.	1 per trait (max 3) + 1 for clarity	**4**
2	**Amphibian vs. Reptile**	Contrast skin and egg types.	2 for skin; 2 for eggs	**4**
3	**Germination Factors**	Identify Water/Warmth and explain need.	2 for factors; 2 for explanation	**4**
4	**Virus vs. Bacteria**	Give one structural difference.	4 for complete comparison	**4**
5	**Bean Seed Parts**	Label and describe three main parts.	1 per part + 1 for descriptions	**4**
6	**Defining Infection**	Explain pathogen entry and harm.	2 for entry; 2 for harm/growth	**4**
7	**States of Matter**	Define Solid, Liquid, and Gas.	1 per state + 1 for accuracy	**4**
8	**Evaporation (Puddles)**	Explain heat's role in the state change.	2 for process; 2 for heat impact	**4**
9	**Shadows & Light**	Choose "Opaque" and justify.	1 for choice; 3 for justification	**4**
10	**Writing & Friction**	Explain "grip" vs. "slipping."	2 for grip; 2 for zero-friction result	**4**
11	**Friction Disadvantages**	List 3 problems + 1 solution.	1 per problem; 1 for solution	**4**

12	**Pinhole Camera**	Define and explain inverted image.	2 for def; 2 for straight-line logic	**4**
13	**Planet Mercury**	Explain position and temperature range.	1 for position; 3 for atmosphere role	**4**
14	**Pollution Examples**	Define pollution + Air/Water examples.	2 for def; 1 per example	**4**
15	**Greenhouse Effect**	Propose 3 changes for air quality.	1 per activity + 1 for logic	**4**

Marking Scheme for ERQs

Q. No.	Question Topic	Marking Criteria	Marks Breakup	Total
1	**Soil Layers & Humus**	Describe 3 layers (Topsoil, Subsoil, Bedrock) and the role of Humus.	3 marks for layers; 2 marks for humus explanation (nutrients/moisture).	**5**
2	**Pollution Impacts**	Contrast Air, Water, and Land pollution effects on flora/fauna.	1.5 marks per pollution type; 0.5 for overall comparison.	**5**
3	**Sustainable Garden**	Propose 3 measures based on soil/pollution knowledge.	1 mark per measure; 2 marks for scientific reasoning.	**5**
4	**Simple Machines**	Define Inclined Plane and Wedge; explain mechanical advantage.	2 marks for definitions; 3 marks for "work easier" explanation.	**5**
5	**Lightning Process**	Explain static electricity, charge separation, and discharge.	2 marks for charges; 3 marks for the discharge process.	**5**
6	**Machine Application**	Apply machines to moving a crate and splitting wood.	2.5 marks for crate (Inclined Plane); 2.5 marks for wood (Wedge).	**5**
7	**Solar System**	Name Sun + 8 planets in order; explain gravity/orbit.	2 marks for names/order; 3 marks for gravity/inertia explanation.	**5**

Directorate of Curriculum, Assessment & Research Sindh Jamshoro

Model Paper 2025-2026

Time: …… Minutes Grade: VI Subject: Science Total Marks: 100

Name of Student: _____S/D/O_____ Gender:(Boys/Girls)

Medium: _____ School Name: _____

Taluka:_____City/Village:_____Signature of Invigilator: _____

PART (A)

Multiple Choice Questions. **[40 Marks]**

1: **The part of the cell controls all activities is:**

(a) cytoplasm **(b) Nucleus** (c) cell wall (d) cell membrane

2: The part of the plant cell which gives its regular shape is:

(a) Nucleus (b) Chlorophyll (c) cell membrane **(d) cell wall**

3: The smallest unit of life is:

(a) cell (b) atom (c) molecule (d) Tissue

4: Ear helps in hearing as well as functioning as body:

(a) Touching (b) Shivering (c) feeling **(d) Balancing**

5: The surface of human tongue containing the receptors:

(a) taste receptors (b) Touch receptors **(c) Sweat receptors** (d) Smell receptors

6: Skin detect the sense of:

(a) Smell **(b) Touch** (c) Sweat (d) feel

7. **If a person's eardrum is damaged, the function will be most affected is:**

(a)detecting smell (b) identifying the taste

(c) transmitting sound vibrations (d) balancing the body

8: During photosynthesis process plant produces food like:

(a) Minerals **(b) Glucose** (c) Protein (d) Fat

9: The plant performs main reactions during photosynthesis:

(a) Two (b) Three (c) Four (d) Five

10: Gaseous exchange in plants occurs through:

(a) Node (b) Stem (c) Root **(d) Stomata**

11. **Chlorophyll is important for photosynthesis because:**

(a) it store food in the plants **(b) it absorb sunlight energy**

(c) it transports water from roots (d) it protects leaves from insects

12: The one of the gas important factor in the process of photosynthesis is:

(a) oxygen (b) methane (c) carbon **(d) carbon-di-oxide**

13. The process occurs only in plants is:

(a) photosynthesis (b) respiration (c) digestion **(**d) breathing

14. The end product of respiration is known as:

(a) Oxygen **(b) Carbon dioxide** (c) Nitrogen (d) Hydrogen

15: The place where glucose formed in the plants is known as:

(a) Stem (b) Shoots **(c) Leaf** (d) Roots

16. The Complex molecule breaks into smaller molecules by:

(a) Parasites **(b) Decomposers** (c) Producers (d) Consumers

17. An example of mutualism (both organisms benefit) is:

(a) A bee collecting nectar while pollinating flowers (b) A lion eating a zebra

(c) A mosquito sucking blood from a human (d) A fungus causing disease in plants

18: An abiotic factor in the environment is:

(a) Grass (b) Rabbit **(c) Soil** (d) Tree

19. If all decomposers disappeared, what would happen first?

(a) Oxygen levels would rise (b) **Dead matter would accumulate**

(c) Plants would grow faster (d) Predators would increase

20. Why are predators important for maintaining balance in ecosystems?

(a) They increase prey population (b) They recycle nutrients into soil

(c) They produce oxygen for prey **(d) They prevent overpopulation of prey species**

21. The gas is used to fill party balloons is:

(a) Hydrogen (b) Oxygen (c) Nitrogen (d) Carbon mono oxide

22. The smallest unit of matter:

(a) compound (b) molecule **(c) atom** (d) mixture

23. When two or more atoms join together, they form a…

(a) compound (b) element **(c) molecule** (d) mixture

24. Which of the following is a compound?

(a) Water (H_2O) (b) Oxygen (O_2) (c) Iron (Fe) (d) Salt mixed with sand

25. A process used to separate colored chemicals or substances is called:

(a) Filtration (b) Distillation **(c)Chromatography** (d) Crystallization

26: The symbol of Potassium element represented by:

(a) P **(b) K** (c) Po (d) Ko

27. An example of a mixture is:

(a) Hydrogen gas (H_2) (b) Carbon dioxide (CO_2)

(c) Sodium chloride (NaCl) **(d) Salt solution in water**

28. A Method can separate a mixture but not a compound:

(a) Filtration (b) Burning (c) Chemical reaction (d) Electrolysis

29. For the process of burning or combustion required:

(a) Carbon dioxide gas **(b) Oxygen gas** (c) Nitrogen gas (d) Argon gas

30. The percentage of Nitrogen gas in the air is:

(a) 77% **(b) 78%** (c) 79% (d) 80%

31. The process is takes place in the living things to produce energy from food :

(a) Photosynthesis (b) Combustion **(c) Respiration** (d) Decomposition

32. The energy due to flow of negatively charge electron is called:

(a) Potential (b) Thermal **(c) Electrical** (d) Sound

33. After digestion of food it gives us:

(a) Electrical energy **(b) Chemical energy** (c) Potential energy (d) Kinetic energy

34. When the second wheel in a pair of gears has more teeth than the first one, it turns slower than the first one but with:

(a) Same force **(b) More force** (c) Less force (d) Variable force

35. When a pulley is free to move up and down along with the load it is called:

(a) Same force (b) More force (c) Less force **(d) Variable force**

36. Which one is used in submarine to monitor the surface of water from the depth of water:

(a) Kaleidoscope **(b) Periscope** (c) Microscope (d) Telescope

37. Which metal show greatest speed of sound through it:

(a) Copper (b) Gold (c) Lead **(d) Aluminium**

38. The satellites are used to provide latest information about atmosphere such as clouds and temperature of various regions of earth are called as:

(a) Weather satellites (b) Navigation satellites
(c) Communication satellites (d) Scientific satellites

39. When light passes from air into water, it bends. This property is called…

(a) Reflection **(b) Refraction** (c) Absorption (d) Transmission

40. Sound travel fast in the medium:

(a) Air (b) water **(c) steel** (d) vacuum

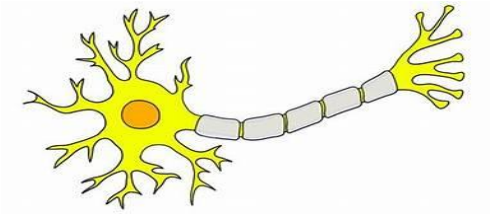
PART (B)

Constructed Response Questions

Note: Attempt 10 Questions, Each Question carry (04) Marks. [40 Marks]

Q.NO.1 Write down three main differences between plant cell and animal cell.

Q.NO.2. Label the figure of Neuron and define its main functions.



Q.NO.3 Why the role of leaf is important in photosynthesis?

Q.NO.4 What is the function of retina in the eye and where it is placed?

Q.NO.5 Define decomposers.

Q.No.6 Why stomata is important and write down three main functions of it.

Q.NO.7 What happens if air become pollute?

Q.NO.8 Write down three main differences between atom and molecule.

Q.NO.9 Why we considered that air is a mixture of gases?

Q.NO.10 How is a suspension different from a solution with 1 example of each?

Q.NO.11 Write down three differences of mixture and compound?

.NO.12 How lever makes our work easy?

Q.NO.13 Define pully and its three main functions.

Q.NO.14 Gears increases the speed. How it works.

Q.No.15 What is the role of surface in reflecting of light?

Q.No.16 What is satellite and its function?

PART (C)
Extended/Elaborated Response Questions

Note: Attempt any 4 Questions, each question carries 5 Marks. [20 Marks]

Q.NO.1 Label at least five parts of the Microscope.

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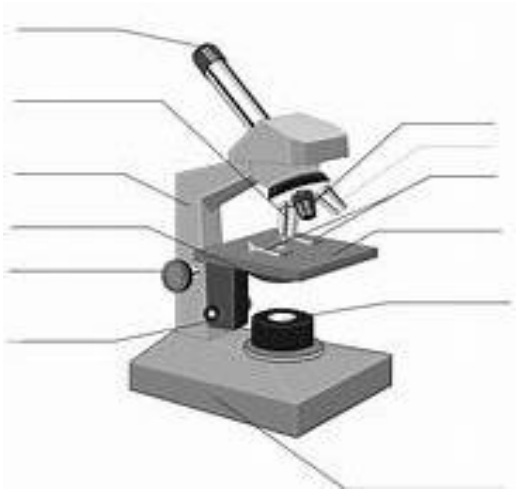


Q.NO.2 Enlist the five uses of mixtures in our daily life.

Q.NO.3 Describe function of root and shoot system in plant?

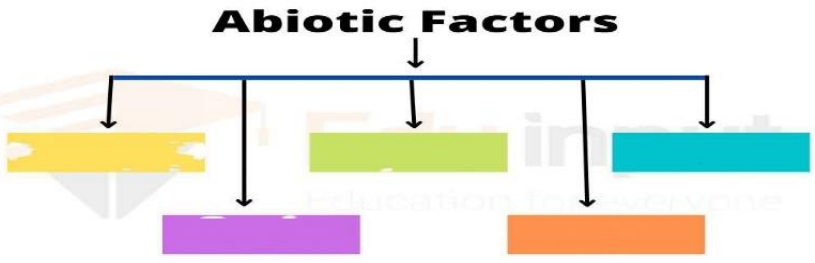
Q.NO.4 Explain with examples how energy can change from one form to another?

Q.NO.5 Draw the figure of leaf and label its different parts.

Q.NO.6 Satellite tells us the position, where we are. Explain How?

OR

Q.NO.7 The write the names of abiotic factors which are necessary for living organisms:



Directorate of Curriculum, Assessment & Research Sindh Jamshoro

Model Paper 2025-2026

Time: …… Minutes Grade: VII Subject: Science Total Marks: 100

Name of Student: _____S/D/O_____ Gender:(Boys/Girls)

Medium: _____ School Name: _____

Taluka:_____City/Village:_____ Signature of Invigilator: _____

PART (A) **(40 Marks)**

Multiple Choice Questions

1. The digested food is observed into the blood in the:

(a) mouth **(b) small intestine** (c) stomach (d) large intestine

2. The structure which separates chest cavity from the abdominal cavity is called the:

(a) diaphragm (b) ribs (c) cartilage (d) hologram

3. Oxygen exchange takes place in:

(a) Bronchi (b) Trachea **(c) Alveoli** (d) terminal bronchioles

4. The main gas taken into the lungs during breathing is:

(a) carbon dioxide (b) nitrogen (c) hydrogen **(d) oxygen**

5. Burning and respiration are similar because both:

(a) release energy (b) Don't use oxygen (c) Produce oxygen (d) are physical processes

6. Loss of water from the leaves in the form of water vapors is called:

(a) Osmosis **(b) Transpiration** (c) Diffusion (d)) Photosynthesis

7. Transport of water from roots in plants takes place through:

(a) phloem **(b) xylem** (c) epidermis (d) stomata

8. The vessel that carries blood away from the heart is called:

(a) vein **(b) artery** (c) capillary (d) phloem

9. Phloem in plants is responsible for transporting:

(a) water (b) minerals **(c) food** (d) oxygen

10. The largest artery is called:

(a) Aorta (b) Verticle (c) Atrium (d) Pulmonary artery

11. **A plant in a shady spot shows very little transpiration compared to one in the sun. What happens to the transport of water in this plant?**

(a) it increases **(b) it decreases** (c) its stays the same (d) it gets reversed

12. Self-pollination occurs between:

(a) same flower **(b) same or different flower of the same plant**

(c) different flowers (d) flowers of different plants

13. Seed develops from:

(a) ovule (b) ovary (c) anther (d) petals

14. Living place of an organism is called:

(a) species (b) environment (c) ecosystem **(d) habitat**

15. An animal that feed on pants is called:

(a) producer **(b) primary consumer** (c) secondary consumer (d) decomposer

16. Distillation is a technique of:

(a) separation (b) preparation **(c) filtration** (d) disinfection

17. Harmful micro-organism killed from the water by using:

(a) calcium oxide (b) magnesium oxide (c) sodium oxide **(d) chlorine oxide**

18. The atomic mass of an element depend on:

(a) Protons (b) electrons and proton

(c) Neutron and electron **(d) proton and neutron**

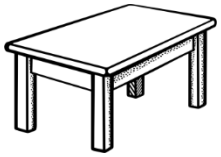
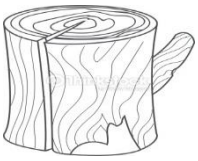
19. Ponds, rivers and seas are examples of the following habitat:

(a) Aquatic (b) desert (c) forest (d) grassland

20. The Valency of carbon is:

(a) 4 (b) 5 (c) 0 **(d) 4**

21. Which of the following is good conductor of electricity?

(a) (b) (c) (d)

22. The SI unit of Energy is:

(a) Ampere (b) Calorie **(c) Joule** (d) Gram

23. The particle that carries a negative electrical charge is:

(a) proton (b) neutron (c) nucleus **(d) electron**

24. An element has 7 electrons I its valance shell, its valency is:

(a) 1 (b) 0 (c) 7 (d) -1

24. By dissolving sugar in hot water, Anum's mother created a concentrated sugar syrup. Sugar crystals separated during cooling. This denotes a:

(A) Physical change that is reversible (B) Chemical change that is reversible

(C) Irreversible physical change (D) Irreversible chemical change

25. The example of chemical change:

(a) Burning of candle (b) Dissolving of sugar (c) Melting of ice (d) Boiling of water

26. The correct symbol of carbon is:

(a) Cl **(b) C** (c) Ca (d) Ag

27. Transfer of heat energy from one place to another with the movement of matter itself is called:

(a) Radiation **(b) Convection** (c) Conduction (d) power

28. Electrons carries charge:

(a) Positive **(b) Negative** (c) Neutral (d) Positive and negative

29. The name of our galaxy is:

(a) Elliptical **(b) Milky way** (c) irregular (d) Spiral

30. Hydrocarbons are the compounds of carbon and

(a) oxygen **(b) hydrogen** (c) nitrogen (d) chlorine

31. vegetable oil is converted into solid fat by a process called:

(a) respiration (b) photosynthesis (c) polymerization **(d) hydrogenation**

32. Sound waves are:

(a) longitudinal (b) transverse (c) vacuum (d) wood

33. A human ear can hear a sound only if its frequency lies between:

(a) 20-200Hz **(b) 20-20,000Hz** (c) 2-20Hz (d) 20-2000Hz

34. How many constellation in the sky?

(a) 40 (b) 48 (c) 80 **(d) 88**

35. Radiations moves in the form of:

(a) grains (b) materials (c) **waves** **(d)** fluid

36. charge in motion produces:

(a) current (b) voltage (c) circuit (d) energy

37. The percentage of earth's surface is covered with salty water is:

(a) 79.5% (b) 89.5% (c) 95.7% **(d) 97.5%**

38. The scientific theory that describe the origin of the universe is called:

(a) Theory of relativity (b) Atomic theory

(c) Big Bang Theory (d) theory of evolution

39. The process by which a solvent pass through a porous is called:

(a) Distillation (b) Filtration (c) Chlorination **(d) Osmosis**

40. A black hole has a very strong:

(a) electric field **(b) Gravitational field** (c) Magnetic field (d) Electromagnetic

PART (B)

Constructed Response Questions (40 Marks)

Note: Attempt Any 10 Questions, Each Question carry 4 Marks

Q.NO.1 List out any four suggestion through which we prevent from diarrhea and Constipation?

Q.NO.2 (a) Name the vessels which carry blood to the heart?
(b) Name the blood vessels that brings oxygenated blood to the heart chamber?
(c) Which chamber of the human heart carry deoxygenated blood?

Q.NO.3 Name any 4 agents used for cross pollination?

Q. NO.4 Water is absorbed by root hairs by osmosis. If the plant is kept in salty soil, what will happen to water absorption and why?

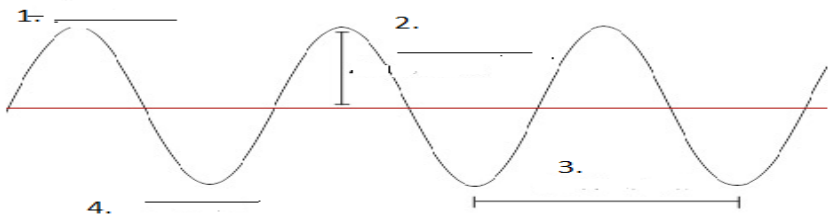
Q. NO.5 Write down any 4 differences between Breathing and Burning process?

Q. NO.6 (a) How 'Refractive index' of any medium calculated?
(b) What is the refractive index of Air and water?

Q. NO.7 (a) Why do we see bubbles in water, during the boiling process of it?
(b) How many component of splitting of light?

Q.NO.8 Name the basic components of an ecosystem?

Q.NO.9 Label the figure with the terms Amplitude, crest and trough at their suitable places.



Q.NO.10 How desert habitat is different from forest habitat?

Q.NO.11. Differentiate between atomic number and mass number with examples(1 for each)

Q.NO. 12 Write down the audible frequency range of human ear, Dog, radio and Dolphin?

Q.NO.13 Why radiation is important in our life?

Q.NO.14 (a) Write any two applications of Parallel circuit?
(b) Write any one disadvantage of Series circuit?

Q.NO.15 Name any four safety devices to prevent ourselves while using electricity from the main power

Q.NO.16. Define the following with examples: i. a star, ii. A planet, iii. A moon, iv. A black hole

PART (C)

Extended/Elaborated Response Questions (20 Marks)

Note: Attempt any 4 Questions, Each question carry 5 Marks.

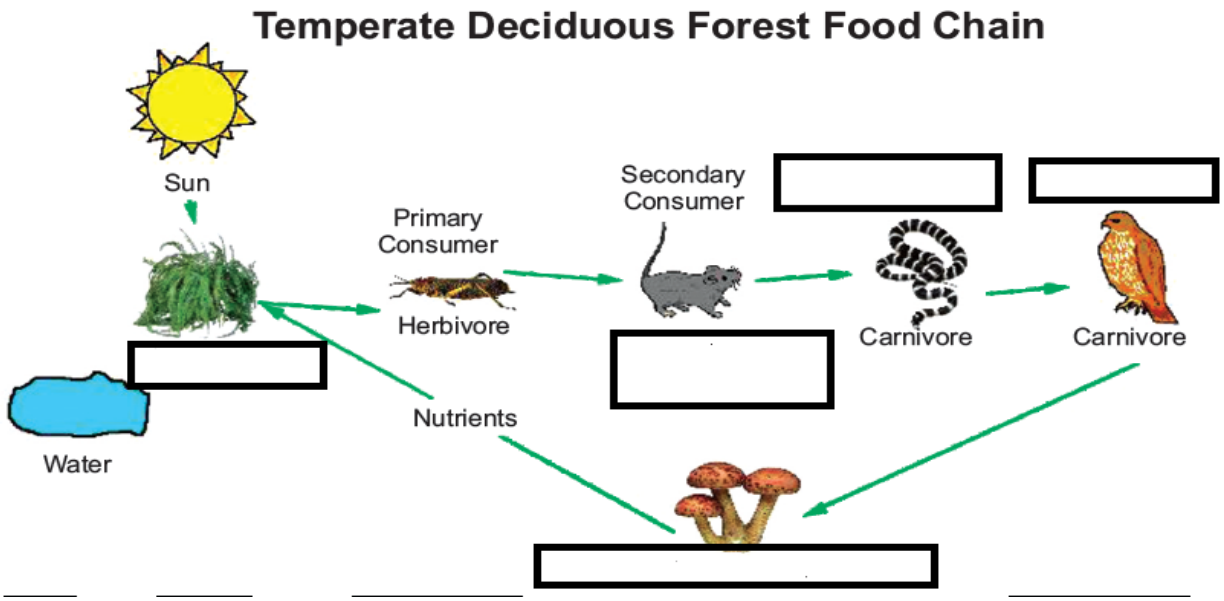
Q.NO. 1 Write any 5 symptoms of people who has diabetes.

Q.NO. 2 Write down the names with chemical formula of any 5 compounds.

Q.NO.3 State the factors on which sounds depends?

Q.NO.4 Explain the effects of electric current in daily use appliances.

Q.NO. 5 Complete the diagram of Food chain.



Q.NO. 6. Discuss a water treatment plant for purification of water?

Q.NO.7 Define reproduction and differentiate between two types of reproduction?

Q.NO.9 Explain reversible change and irreversible change with 1 one example of each from your surrounding.

Directorate of Curriculum, Assessment & Research Sindh Jamshoro

Model Paper 2025-2026

Time: …… Minutes Grade: VIII Subject: Science Total Marks: 100

Name of Student: _____S/D/O_____ Gender:(Boys/Girls)

Medium: _____ School Name: _____

Taluka:_____City/Village:_____ Signature of Invigilator: _____

PART (A) **(40 Marks)**

Multiple Choice Questions

1. The one of the following is an example of conditioned reflex is:

(A) Sneezing (C) Withdrawal of hand on touching a hot

(B) Yawning plate (D) Watering of mouth at the smell of food

2. Burning of natural gas and running of vehicles are the causes of:

(A) Thermal pollution (B) Water pollution

(C) Land pollution (D) Thermal Pollution

3. Metals are good conductors of:

(A) Heat (B) Electricity (C) Heat and electricity (D) Heat and Light

4. If amplitude of sound increase then what would be its loudness?

(A) Increases (B) Decreases (C) May increases (D) May increases or decreases

5. Acids react with metals and produce:

(A) Oxygen (B) Hydrogen (C) Nitrogen (D) Carbon Dioxide

6. The source of electricity can be used in voltaic cell:

(A) Chemical (B) Mechanical (C) Nuclear (D) Thermal

7. We can see the television programme due to

(A) Natural Satellite (B) Artificial Satellite (C) Sound waves (D) Air

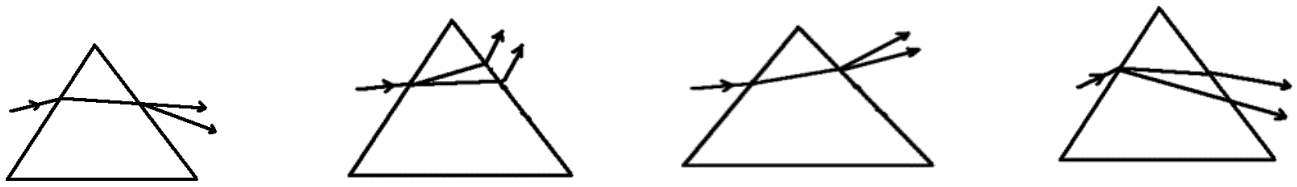
8. Defects in the cells of retina causes:

(A) short sightedness (B) long sightedness (C) color blindness (D) defects of sigh

10. Earth rotates around the sun and it gives:

(A) Winter season (B) Autumn season (C) Day and Night (D) Summer Season

9. Which one of the following diagram best illustrates the dispersion effect of a prism on white light?

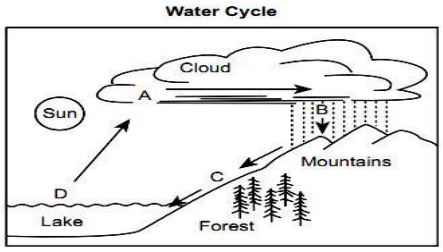


(A) (B) (C) (D)

10. The basic source of energy for plants:

(A) Moon (B) Soil (C) Sun (D) Air

11. The process is occurring at D in the picture is:



(A) Condensation (B) Filtration

(C) Run off (D) Evaporation

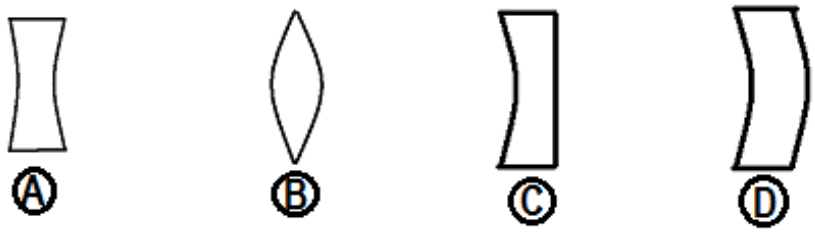
12. The part of the human brain which performs the balancing of the body is called:

(A) cerebrum (B) cerebellum (C) medulla (D) muscle fibre

13: A device which is used the energy of sun rays to produce electrical energy is called:

(A) dry cell (B) solar cell (C) mercury cell (D) alkaline cell

14. Which one of the following is convex lens?



15. The first artificial satellite sent by Russia into orbit around the earth:

(A) space shuttle-I (B) sputnik II (C) sputnik III (D) sputnik I

16. Leukemia (type of cancer) is a disease caused by:

(A) air pollution (B) radiation pollution (C) water pollution (D) land pollution

17. The sound of large drum is more than a small drum because:

(A) its produced less number of vibration (B) its area for vibration is more
(C) its produced more number of vibration (D) its area of vibration is less

18. Which one of the following is the property of acid:

(A) sour taste (B) bitter taste (C) turn red litmus to blue (D) PH equal to 7

19. Air pollution causes, effects on human health:

(A) breathing (B) Movement (C) Nutrition (D) reproduction

20. Plants which make, its own food by photosynthesis process is called:

(A) consumer (B) producer (C) decomposer (D) microorganism

21. A farmer wants to neutralize the acidity of the soil. Which compound should use?

(A) potassium nitrate (B) potassium sulfate (C) calcium hydroxide (D) ammonium nitrate

22: The instrument used to measure the atmospheric pressure is called:

(A) Thermometer (B) barometer (C) anemometer (D) lactometer

23. The example of derived quantities is:

(A) Area (B) length (C) mass (D) time

24. Increase in length, area and volume of solid, liquid and gases due to change in temperature is:

(A) Electrical Expansion (B) Chemical expansion
(C) Molecular expansion (D) Thermal expansion

25. Each kidney has about a million tiny units

(A) Neuron (B) Nephron (C) Ureter (D) Nerves

26. Litmus paper turns **red** when dipped in:

(A) Base (B) Acid (C) Neutral solution (D) Salt solution

27. Convert 2 kilometers = _____ meters

(A) 20 (B) 200 (C) 2000 (D) 20,000

28. Railway tracks are laid with small gaps between them to prevent:

(A) Rusting (B) Breaking due to expansion (C) Slipping of trains (D) Noise production

29. Phenolphthalein turns **pink** in:

(A) Acidic solution (B) Basic solution (C) Neutral solution (D) Salt solution

30. Lemon juice turns blue litmus paper:

(A) Red (B) Blue (C) Green (D) No change

30. Telephone and electric wires sag in summer because:

(A) They expand due to heat (B) They contract due to cold

(C) They are too heavy (D) They are loosely fixed

31. A bicycle light works with the help of:

(A) Battery (B) Dynamo (C) Solar panel (D) Generator

32. Wind turbines convert:

(A) Heat into electricity (B) Wind's kinetic energy into electricity

(C) Chemical energy into electricity (D) Solar energy into electricity

33. Which device is commonly used in mobile phones to store and supply electricity?

(A) Dynamo (B) Battery (C) Solar cell (D) Generator

34. Astronauts face health problems due to lack of gravity. A possible solution is:

(A) Stop space travel (B) Use exercise machines in spacecraft

(C) Increase food supply only (D) Sleep longer hours

35. Pollution from rocket launches can harm the atmosphere. A solution is:

(A) Use eco-friendly fuels (B) Launch more rockets

(C) Avoid satellites (D) Increase rocket size

36. A school bus travels 5 km. In SI units, this distance is:

(A) 500 m (B) 5000 m (C) 50 m (D) 0.5 m

37. A student weighs 40 kg. In SI units, this is:

(A) 40 g (B) 400 g (C) 40,000 g (D) 4000 g

38. Involuntary actions are controlled mainly by:

(A) Cerebrum (B) Spinal cord (C) Medulla oblongata (D) Cerebellum

39. Voluntary actions are performed:

(A) Without thinking (B) With conscious control

(C) Only during sleep (D) Only in emergencies

40. Involuntary actions are important because they:

(A) Help us play games (B) Maintain life processes automatically

(C) Allow us to write exams (D) Help us learn new skills

PART (B)

Constructed Response Questions (40 Marks)

Note: Attempt Any 10 Questions, Each Question carry 4 Marks

Q.NO.1 Explain the role of chlorophyll in photosynthesis.

Q.NO.2 Write four differences between plant and animal cells.

Q.NO.3 Describe the importance of water in maintaining life.

Q. NO.4 Differentiate between physical and chemical changes with two examples each.

Q. NO.5 Why is friction sometimes useful and sometimes harmful? Give examples.

Q. NO.6 Describe the role of the heart in the circulatory system.

Q. NO.7 Difference between Pitch & loudness of sound with one examples.

Q. NO.8 Explain difference between concave & convex lens with the help of diagram.

Q. NO.9 Define amplitude of sound with the help of diagram.

Q.NO.10 Write any two differences between saturated and unsaturated solution.

Q.NO.11 Describe the reactants and products in a chemical reaction?

Q.NO.12 Draw the atomic structure of the given element. (Atomic number: Carbon: 6)

Q.NO.13 Define scalar and vector quantities with one examples.

Q.NO.14 Write any TWO significances of transpiration.

Q.NO.15 Give any two differences between acid and base.

Q.NO.16 Write any three uses of salt.

Q.NO.17 What is space station and satellite?

Q.NO. 18 Enlist the types of lens and one use of each lens?

PART (C)

Extended/Elaborated Response Questions (20 Marks)

Note: Attempt any 4 Questions, Each question carry 5 Marks.

Q.NO. 1 Describe the structure of the human respiratory system and explain the process of gaseous exchange.

Q.NO. 2 Discuss the importance of renewable energy sources. Suggest measures to promote their use in Pakistan.

Q.NO.3 What is greenhouse effect? Explain why the temperature of the earth's atmosphere is being increased day by day.

Q.NO.4 Balance the chemical equations of the following:

(i) $CH_4 + O_2 \rightarrow H_2O + CO_2$ **(ii)** $Zn + HCl \rightarrow H_2 + ZnCl_2$

(iii) $CuO + NH_3 \rightarrow Cu + H_2O + N_2$ **(iv)** $Fe + HCl \rightarrow FeCl + H_2$ **(v)** $H_2 + O_2 \rightarrow H_2O$

Q.NO. 5 Write down any 5 benefits of space exploration in the field of medicines?

Q.NO. 6. Write a short note on fossil fuels as carbon-based energy sources.

Q.NO.7 . List any biotechnological products used in our daily life.

Q.NO.8. Explain thermal expansion of heat in solids and liquids with 2 examples?

Q.NO.9 Write names of five stronger acids with formula.