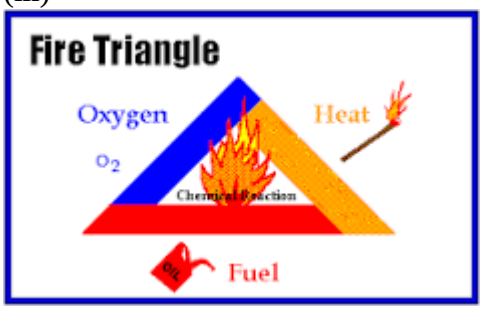
MID TERM EXAM 2025-26
SCIENCE MARKING SCHEME

Class: VIII **Time: 3 hours**
Date: 03.09.25 **Max Marks: 80**

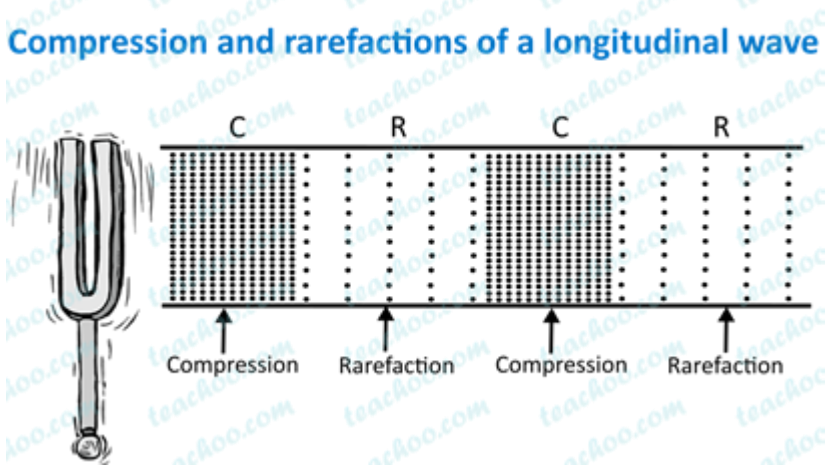
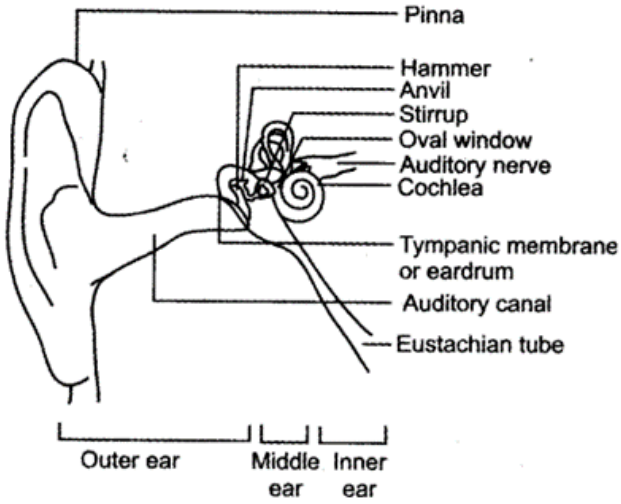
	Section-A BIOLOGY	
1	**(c)** They help crops grow well	1
2	**(c)** Seed drill	1
3	**(a)** Lactobacilli	1
4	**(c)** Alcohol	1
5	**(c)** Critically endangered	1
6	**(d)** Near-threatened	1
7	**(b)** Jim Corbett	1
8	**A** (Both true, R explains A)	1
9	**A** (Both true, R explains A)	1
10	Bacteria, Fungi, Protozoa, Algae, and Viruses	1+ 1
11	**(Attempt either A or B)** **A.** Farmers put seeds in water. **Healthy seeds sink**, while **damaged seeds float**. **OR** **B. Two examples of fertilisers:** Urea, Ammonium sulphate	2
12	(a) **Example of an ecosystem:** Forest / Pond / Desert / Ocean (b) (i) Dodo bird – **Extinct** (ii) Indian giant squirrel – **Endemic**	2
13	Modern seed drill Khurpi Traditional seed drill	3
14	**(a)** Activity shown: **Deforestation** **(b)** Effect: **Loss of biodiversity / Habitat destruction** **(c)** Suggestion: **Reforestation / Create protected areas / Plant more trees**	3

15	**A. The Vanishing Forest** 1. Deforestation 2. Floods, poor crop yield, climate change (any 2) 3. Human activities like deforestation, burning fossil fuels, improper waste disposal, and unsustainable farming practices released greenhouse gases and disrupted natural systems, leading to climate changes in the village. OR 4. Deforestation reduced tree cover, leading to less water absorption and more surface runoff, which increased the frequency and severity of floods in the village.	4
16	**A. Measures to prevent communicable diseases:** . Maintain personal hygiene A. Wash hands regularly B. Use clean drinking water C. Get vaccinated **D.** Avoid contact with infected persons **OR** **B. (a)** Due to **fungal growth** – spores grow in moist conditions **(b) Not fit** – Fungi produce toxins harmful to health **(c)** Conditions: • Moisture • Warmth • Poor ventilation	5
	Section-B Chemistry	
17	c) 4	1
18	d) Iodine	1
19	c) Coating with kerosene	1
20	c) Blue	1
21	c) Oxygen	1
22	d) Stone	1
23	c) Carbon monoxide and soot	1
24	B. Both A and R are true, and R is not the correct explanation of A.	1

25	Rusting is a specific type of corrosion that only applies to iron and its alloys (like steel) when they react with oxygen and moisture in the presence of other environmental substances. Corrosion, on the other hand, is a broader term that describes the general degradation of materials, including metals, ceramics, and polymers, through chemical reactions with their environment. Essentially, rusting is a subset of corrosion.	2
26	· A. A soda-acid fire extinguisher utilizes the chemical reaction between sodium bicarbonate and sulfuric acid to produce carbon dioxide, which smothers the fire by cutting off the oxygen supply. The extinguisher consists of a metal container holding a sodium bicarbonate solution and a separate glass bottle containing concentrated sulfuric acid. When the extinguisher is activated, the bottle breaks, mixing the acid and base, generating carbon dioxide gas.  Soda-acid fire extinguisher OR B. **Innermost Zone (Dark Zone):** This zone is closest to the wick and is characterized by the presence of unburnt wax vapors. It appears dark or black and is the least hot region of the flame. · **Middle Zone (Luminous Zone):** This is the bright, yellow part of the flame. Here, the wax is undergoing incomplete combustion, meaning it's not fully reacting with oxygen. This zone is moderately hot and produces light, contributing to the flame's overall luminosity. · **Outer Zone (Non-Luminous Zone):** This is the outermost part of the flame, appearing blue. In this zone, complete combustion occurs, meaning the wax is reacting fully with oxygen. This is the hottest part of the flame due to the efficient combustion process.	3

27	a) CuSO4 b) Potassium , Sodium c) Salt + hydrogen gas	3
28	(i) CFC (ii) When certain chemicals from the smoke and fumes rise up into the air they mix with the water vapour in the clouds and make it acidic. (iii)  OR (iii) Carbon dioxide increases the temperature of the land by not allowing the radiation to move out of earths surface.	4
29	(i) Electrical wires , jewelleries, utensils (ii) 1 , 3 (iii) Malleability (iv) Ductility OR a (i) Because it reacts with hydrogen sulphide present in air as pollutant (ii) Because when directly exposed to air it reacts with oxygen water vapour and carbon dioxide present in air. b (i) Mg + O2 → MgO (ii) C + O2 → CO2 (iii) H2 + O2 → H2O	5
Section-B Physics		
30	(b) Newton	1
31	(a) Static friction	1
The following question consists of two statements – **Assertion** (A) and **Reason** (R). Answer these questions by 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.		
32	Assertion is true but reason is false	1

33	**Starting Motion:** Applying a force like pushing or pulling can make a stationary object begin to move. **Stopping Motion:** Applying a force like braking can slow down and eventually stop a moving object. **Changing Speed:** Applying a force can either increase or decrease the speed of a moving object. **Changing Direction:** A force can alter the path of a moving object.	2
34	A. Sliding friction and rolling friction are both types of frictional forces, but they differ in how they occur and their magnitude. Sliding friction happens when two surfaces slide against each other, while rolling friction occurs when an object rolls over a surface. Rolling friction is generally much smaller than sliding friction, making it easier to move the objects. OR B. 1. **Friction helps us to walk on the ground**. 2. We can write on a paper or on a board due to friction. 3. Friction helps in stopping the objects.	2
35	Non-contact forces are forces that can act on an object without any physical contact between the objects. These forces are caused by fields, such as gravitational, magnetic, and electrostatic fields. **1.** Gravitational Force**:** This force of attraction exists between any two objects with mass.For instance, the Earth's gravity keeps the moon in orbit and causes objects to fall to the ground. **2.** Magnetic Force**:** This force arises between magnetic materials or magnets. Magnets can attract or repel each other, or attract magnetic materials like iron, without direct contact. **3.** Electrostatic Force**:** This force occurs between electrically charged objects. Like charges repel, and opposite charges attract. Rubbing a comb through hair creates static electricity.	3
36	When a vibrating object moves forward, it pushes and compresses the surrounding air, creating a compression. Conversely, when the object moves backward, it creates a rarefaction, a region of lower pressure. These compressions and rarefactions travel outwards from the source, carrying the sound energy.	3

		
37	 The process of hearing involves the transformation of sound waves into electrical signals that the brain can interpret as sound. Sound waves are collected by the outer ear, amplified in the middle ear, and then converted into electrical signals in the inner ear, which are then sent to the brain for processing.	3
38	i) Friction arises when the irregularities of the two surfaces interlock. ii) Oils are one of the best lubricants and applying them on the door hinges reduces friction and eases functioning. iii) Gymnasts apply the coarse substance on their hands to increase friction for a better grip. OR iv) It is done to provide the shoes better grip on the ground.	4

39	(A)(i) Liquid pressure is primarily affected by three factors: density of the liquid, depth within the liquid, and the acceleration due to gravity. Essentially, pressure increases with both the density of the liquid and the depth you go down into it. The higher the density or the deeper the point, the greater the pressure. (ii) Objects moving in fluids require special shapes, often streamlined, to minimize friction (drag) and improve efficiency. These shapes help the fluid flow smoothly around the object, reducing the opposing force (drag) and making it easier to move. OR (B) (i) . Pressure is force per unit area (ii) A **flat shoe** has a larger area in contact with the **sand** and as such exerts less **pressure** on it. On the other hand, A pencil-heeled **shoe** exerts more **pressure** . (iii) A sharp knife is preferred for chopping fruits and vegetables because it exerts more pressure on a smaller surface area, making it easier to cut through the food. A blunt knife, on the other hand, has a wider edge, requiring more force.	5