**Q1) Which of the following is NOT a sense organ?**

a) Brain

b) Nose

c) Tongue

d) Eye

Correct Answer: Option (a)

Explanation: The brain is not considered a sense organ because it does not directly receive information from the environment like the eyes, ears, nose, tongue, and skin do. However, the brain is responsible for interpreting the signals received from these sense organs and making sense of them. For example, when we see an object, the eyes receive visual signals and send them to the brain for interpretation.

Thus, the correct answer is option (a).

Difficulty Level- Easy

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**Q2)** **Which sense helps us to taste different flavours?**

a) Sight

b) Smell

c) Touch

d) Taste

Correct Answer: Option (d)

Explanation: The sense of taste is responsible for detecting different flavours in the food we eat. Taste buds, which are specialized sensory organs located on our tongue and inside the lining of our mouth, are responsible for detecting different tastes. The human tongue can detect five primary tastes: sweet, sour, salty, bitter, and umami.

Thus, the correct answer is option (d).

Difficulty Level- Easy

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**Q3) Which sense helps us to detect danger through vibrations?**

a) Sight

b) Smell

c) Touch

d) Hearing

Correct Answer: Option (d)

Explanation: The sense of hearing is responsible for detecting sound waves and vibrations in the environment. This sense can help us to detect danger, such as the sound of an approaching vehicle.

Thus, the correct answer is option (d).

Difficulty Level- Easy

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**Q4) Answer the following question with reference to the Audio:** <https://drive.google.com/file/d/18f2oKzwXeqBzjgWYHtsObIQiutFp2Ml7/view?usp=share_link>

**TYPE: Audio**

**What is the main function of the sense of sight?**

a) To detect different smells

b) To detect different textures

c) To detect different colours and shapes

d) To detect different tastes

Correct Answer: Option (c)

Explanation: The sense of sight is responsible for allowing us to see and detect different colours and shapes of objects through our eyes. Our eyes contain specialized cells that are sensitive to light and enable us to see. Light enters the eye and is focused by the lens onto the retina at the back of the eye. The retina contains cells called photoreceptors, which convert light into electrical signals that are sent to the brain.

Thus, the correct answer is option (c).

Difficulty Level- Easy

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**Q5) Which sense organ is responsible for detecting sound?**

a) Nose

b) Tongue

c) Ears

d) Skin

Correct Answer: Option (c)

Explanation: The sense of hearing is responsible for allowing us to detect different sounds and noises through our ears. Our ears contain specialized cells called hair cells that are sensitive to sound vibrations. These hair cells are located in the cochlea, a spiral-shaped structure inside the ear. When sound waves enter the ear, they cause the hair cells to vibrate, which in turn produces electrical signals that are sent to the brain.

Thus, the correct answer is option (c).

Difficulty Level- Hard

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**Q6) Which of the following is responsible for our sense of taste?**

a) Nerves

b) Muscles

c) Taste buds

d) Bones

Correct Answer: Option (c)

Explanation: These taste cells are specialized sensory receptors that are sensitive to different chemical compounds found in food. When a taste bud is stimulated by a particular compound, it sends a signal to the brain via nerves, which is then interpreted as a specific taste. For example, when taste cells are stimulated by sugar molecules, they send a signal to the brain that is interpreted as a sweet taste.

Thus, the correct answer is option (c).

Difficulty Level- Easy

$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$**Q7) Which of the following is a common symptom of indigestion?**

a) Chest pain

b) Headache

c) Backache

d) Earache

Correct Answer: Option (a)

Explanation: Chest pain. Indigestion, also known as dyspepsia, is a term used to describe discomfort or pain in the upper abdomen. It can be caused by a variety of factors, including overeating, eating too quickly, or consuming spicy or fatty foods.

Thus, the correct answer is option (a).

Difficulty Level- Very Hard

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**Q8) Which organ produces bile to aid in digestion?**

a) Liver

b) Stomach

c) Pancreas

d) Small intestine

Correct Answer: Option (a)

Explanation: Bile is a greenish-yellow fluid that is produced by the liver and secreted into the small intestine. It contains bile acids, which help to break down fats into smaller droplets, making them easier to absorb. Bile also helps to neutralize stomach acid and digest certain vitamins, such as A, D, E, and K. The gallbladder is a small organ located under the liver that stores bile and releases it into the small intestine when needed.

Thus, the correct answer is option (a).

Difficulty Level- Medium

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**Q9) What is the purpose of peristalsis in the digestive system?**

a) To mix food with digestive juices

b) To absorb nutrients from food

c) To break down food into smaller pieces

d) To move food through the digestive tract

Correct Answer: Option (d)

Explanation: Peristalsis is a series of muscle contractions that help to move food through the digestive tract. These contractions occur in the walls of the digestive organs and help to propel food forward, allowing for digestion and absorption to occur.

Thus, the correct answer is option (d).

Difficulty Level- Medium

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**Q10) What is the function of the pancreas in the digestive system?**

a) To produce bile to aid in digestion

b) To store and release bile as needed

c) To produce enzymes that break down carbohydrates, proteins, and fats

d) To produce insulin and regulate blood sugar levels

Correct Answer: Option (c)

Explanation: The pancreas is a gland located behind the stomach that produces enzymes that help to break down food in the small intestine. These enzymes include amylase, which breaks down carbohydrates; protease, which breaks down proteins; and lipase, which breaks down fats.

Thus, the correct answer is option (c).

Difficulty Level- Hard

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**Q11)** **Answer the following question with reference to the Audio**

<https://drive.google.com/file/d/18f2oKzwXeqBzjgWYHtsObIQiutFp2Ml7/view?usp=share_link>

**TYPE: Audio**

**Which of the following is not a type of seed?**

a) Gymnosperm

b) Angiosperm

c) Monocot

d) Dicot

Correct Answer: Option (c)

Explanation: Monocot is a term used to describe a type of flowering plant that has one cotyledon, or seed leaf, in its seed. This is in contrast to dicots, which have two cotyledons. The term "monocot" comes from the Greek words "mono," meaning one, and "cotyledon," meaning seed leaf. Monocots have a number of unique characteristics, such as leaves with parallel veins, flower parts in multiples of three, and a scattered arrangement of vascular tissue in their stems.

Thus, the correct answer is option (c).

Difficulty Level- Medium

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**Q12) Which part of the seed absorbs water and nutrients from the soil?**

a) Seed coat

b) Embryo

c) Cotyledon

d) Endosperm

Correct Answer: Option (c)

Explanation: The cotyledon is a structure that is found in the seed of most flowering plants. It is a thick, fleshy structure that is often rich in nutrients, and it is the part of the seed that provides food for the young plant until it can begin to make its own food through photosynthesis. When a seed germinates, the embryo inside the seed begins to grow and develop.

Thus, the correct answer is option (c).

Difficulty Level- Medium

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**Q13) Which part of the seed develops into a new plant?**

a) Cotyledon

b) Embryo

c) Seed coat

d) Endosperm

Correct Answer: Option (b)

Explanation: The embryo is a crucial part of a plant seed, and it is the part of the seed that is responsible for developing into a new plant. It contains the young root, shoot, and leaves, which will eventually develop into the fully-grown plant. When a seed germinates, the embryo is activated, and it begins to grow and develop.

Thus, the correct answer is option (b).

Difficulty Level- Medium

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**Q14) What is the name of the process by which seeds are spread over a wide area?**

a) Germination

b) Fertilization

c) Pollination

d) Seed dispersal

Correct Answer: Option (d)

Explanation: Seed dispersal is a critical process in the life cycle of plants. It refers to the ways in which seeds are spread from the parent plant to new locations, where they can germinate and grow into new plants. There are several methods of seed dispersal. Wind dispersal is a common method, where seeds are carried by the wind and scattered over a wide area.

Thus, the correct answer is option (d).

Difficulty Level- Hard

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**Q15) What is the name of the process by which plants produce seeds?**

a) Photosynthesis

b) Germination

c) Pollination

d) Fertilization

Correct Answer: Option (d)

Explanation: Fertilization is a key process in the reproduction of plants. It involves the union of male and female gametes (reproductive cells) in the flower of the plant, leading to the formation of a fertilized ovule that eventually develops into a seed. In flowering plants, the male gametes are contained within pollen grains, while the female gametes are located in the ovules of the ovary.

Thus, the correct answer is option (d).

Difficulty Level- Medium

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**Q16)** **Answer the following question with reference to the Audio**

<https://drive.google.com/file/d/1T4TACPRHJMksP-k4xSIjAclPzxTCxeqE/view?usp=share_link>

**TYPE: Audio**

**Which of the following is NOT a use of water?**

a) Drinking

b) Cooking

c) Washing

d) Painting

Correct Answer: Option (d)

Explanation: Water is not commonly used for painting because it does not have the necessary properties required for a good paint medium. Paints typically consist of pigments, binders, solvents, and additives. Water does not have the necessary binding properties to hold the pigments together, and it also does not have the necessary solvents to dissolve the binders and additives.

Thus, the correct answer is option (d).

Difficulty Level- Easy

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**Q17) Which of the following is NOT a way to conserve water?**

a) Taking long showers

b) Turning off the tap while brushing teeth

c) Fixing leaking taps

d) Reusing water for plants

Correct Answer: Option (a)

Explanation: Taking long showers wastes water because it leads to a higher consumption of water per person. On average, a 5-minute shower uses around 40 litres of water, while a 10-minute shower uses around 80 litres of water. Thus, reducing the shower time is an effective way to conserve water. Turning off the tap while brushing teeth and fixing leaking taps are also good ways to conserve water because it reduces the amount of water wasted due to unnecessary water flow.

Thus, the correct answer is option (a).

Difficulty Level- Medium

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**Q18) Which of the following is NOT a way to reduce water pollution?**

a) Proper disposal of hazardous waste

b) Using pesticides and fertilizers in farming

c) Recycling

d) Reducing the use of plastic

Correct Answer: Option (b)

Explanation: Using pesticides and fertilizers in farming can lead to water pollution because they can seep into the ground and contaminate groundwater or surface water, leading to harmful effects on aquatic life and human health. Thus, it is not a way to reduce water pollution. Proper disposal of hazardous waste, recycling, and reducing the use of plastic are all effective ways to reduce water pollution. Proper disposal of hazardous waste ensures that harmful chemicals and substances do not end up in water bodies.

Thus, the correct answer is option (b).

Difficulty Level- Hard

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**Q19) Which of the following gases is NOT present in water?**

a) Oxygen

b) Carbon dioxide

c) Nitrogen

d) Hydrogen

Correct Answer: Option (d)

Explanation: Water is composed of two hydrogen atoms and one oxygen atom, which combine to form a stable compound known as H2O. While the hydrogen atoms are present in the water molecule, they are not present in the form of free hydrogen gas. This is because the hydrogen atoms in water are chemically bound to the oxygen atom, forming a covalent bond between the atoms.

Thus, the correct answer is option (d).

Difficulty Level- Medium

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**Q20) Which of the following is the best conductor of electricity?**

a) Distilled water

b) Tap water

c) Saltwater

d) Boiling water

Correct Answer: Option (c)

Explanation: Pure distilled water does not conduct electricity at all, while tap water and boiling water conduct only a small amount of electricity. However, when salt is added to water, it becomes a good conductor of electricity.

Thus, the correct answer is option (c).

Difficulty Level- Hard

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**Q21) Answer the following question with reference to the image**

<https://drive.google.com/file/d/1VX92AqxKdl5zX3R8eUvYOv1izlHdW4jS/view?usp=share_link>

**TYPE: Image**

**Which part of the mango tree is used to make medicine?**

a) Leaves

b) Stem

c) Fruit

d) Bark

Correct Answer: Option (d)

Explanation: The bark of the mango tree contains several bioactive compounds, such as mangiferin, which have been found to exhibit a range of medicinal properties. These include anti-inflammatory, antioxidant, anti-cancer, anti-diabetic, and antimicrobial effects. Traditional medicine systems in several countries, including India and China, have long used mango bark extracts for the treatment of various ailments, such as diarrhoea, dysentery, fever, and respiratory infections.

Thus, the correct answer is option (d).

Difficulty Level- Easy

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**Q22) Which of the following is not a variety of mango?**

a) Alphonso

b) Totapuri

c) Golden Delicious

d) Langra

Correct Answer: Option (c)

Explanation: Golden Delicious is not a variety of mango because it is actually a type of apple. It is a cultivar of apple that originated in West Virginia, United States, in the early 20th century. Golden Delicious apples are known for their yellow-green skin and sweet, juicy flesh. While mangoes also come in various varieties, such as Alphonso, Totapuri, and Langra, Golden Delicious is not among them.

Thus, the correct answer is option (c).

Difficulty Level- Medium

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**Q23) What is the name of the fungal disease that affects mango trees?**

a) Black spot

b) Anthracnose

c) Rust

d) Powdery mildew

Correct Answer: Option (b)

Explanation: Anthracnose is a fungal disease that affects many different plants, including mango trees. It is caused by the fungus Colletotrichum gloeosporioides, which can infect the leaves, flowers, and fruits of the mango tree. Symptoms of anthracnose in mangoes include dark spots or lesions on the leaves and fruit, as well as fruit rot and premature drop of the fruit.

Thus, the correct answer is option (b).

Difficulty Level- Hard

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**Q24) Which of the following is not a factor that affects the ripening of mangoes?**

a) Temperature

b) Humidity

c) Sunlight

d) Soil type

Correct Answer: Option (d)

Explanation: Soil type does not directly affect the ripening of mangoes because ripening is primarily influenced by external factors such as temperature, humidity, and sunlight. While soil type can indirectly affect the health and growth of the mango tree, it does not directly impact the ripening process of the fruit. Optimal temperature, humidity, and sunlight conditions are necessary for the enzymes responsible for ripening to function effectively.

Thus, the correct answer is option (d).

Difficulty Level- Hard

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**Q25) Which of the following parts of the mango tree is responsible for producing flowers?**

a) Leaves

b) Stem

c) Roots

d) Branches

Correct Answer: Option (d)

Explanation: The branches of the mango tree are responsible for producing flowers, which are the reproductive structures of the mango plant. The mango tree is monoecious, which means that it produces both male and female flowers on the same tree. The male flowers are borne on long panicles or inflorescences that grow on the branches, while the female flowers are small and inconspicuous, and are located at the base of the panicle.

Thus, the correct answer is option (d).

Difficulty Level- Medium

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**Q26) What does the snake charmer do to catch the snake?**

a) He plays a tune on his flute

b) He hides and waits for the snake to come to him

c) He uses a net to trap the snake

d) He uses his bare hands to catch the snake

Correct Answer: Option (a)

Explanation: the snake charmer catches the snake by playing a tune on his flute. This technique is known as snake charming, which involves playing music or using other methods to attract snakes and then handling them. The snake charmer in the story uses this technique to catch the snake without harming it. The music played on the flute creates vibrations in the air that the snake can sense, and it responds by coming out of its hiding place.

Thus, the correct answer is option (a).

Difficulty Level- Medium

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**Q27) Which of the following is NOT a characteristic of snakes?**

a) They have scales

b) They are cold-blooded

c) They have fur

d) They do not have legs

Correct Answer: Option (c)

Explanation: Snakes are a type of reptile, which means that they have some unique physical characteristics. One of these characteristics is that they do not have fur, but instead have scales that cover their body. These scales are made up of a material called keratin, which is also found in human hair and nails. The scales help to protect the snake's body and keep it from drying out.

Thus, the correct answer is option (c).

Difficulty Level- Hard

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**Q28)** **Answer the following question with reference to the Audio**

<https://drive.google.com/file/d/1C6Ks57auEEQz45gnAinYsiRJ8mHAve6t/view?usp=share_link>

**TYPE: Audio**

**Which of the following is not a characteristic of snakes?**

a) Cold-blooded

b) Legless

c) Poisonous

d) Have fur

Correct Answer: Option (d)

Explanation: Snakes are a type of reptile that are characterized by several unique features. First, they are cold-blooded, which means their body temperature fluctuates with the environment around them. Second, they are legless, and instead move by slithering on their belly using their muscles.

Thus, the correct answer is option (d).

Difficulty Level- Hard

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**Q29) How do snakes move?**

a) Jumping

b) Crawling

c) Walking

d) Flying

Correct Answer: Option (b)

Explanation: Snakes do not have limbs or legs like most animals, which means they cannot walk or run. Instead, snakes use their muscles to slither and move on the ground. They do this by contracting and relaxing their muscles in a coordinated way, which propels their body forward in a smooth, flowing motion. Snakes have a series of ribs and muscles that run along their entire body, which allows them to move in any direction, including sideways and even vertically up trees or other surfaces.

Thus, the correct answer is option (b).

Difficulty Level- Easy

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**Q30) What is the main diet of snakes?**

a) Plants

b) Insects

c) Meat

d) Fish

Correct Answer: Option (c)

Explanation: Snakes are generally carnivorous, which means they eat other animals for their nutrition. Their diet depends on their size, habitat, and species. Most snakes eat rodents, birds, lizards, and other small mammals, while some larger snakes can even eat larger prey like deer, pigs, and monkeys.

Thus, the correct answer is option (c).

Difficulty Level- Medium

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**Q31) Which of the following is an example of a device that uses radiation to transfer heat?**

a) Toaster

b) Oven

c) Microwave

d) Air conditioner

Correct Answer: Option (a)

Explanation: A toaster is a kitchen appliance that is commonly used to toast bread. When the bread is placed in the toaster and the toaster is turned on, an electrical current passes through the heating element inside the toaster. This heating element then emits infrared radiation, which is a type of electromagnetic radiation. The radiation is absorbed by the bread, which causes the molecules inside the bread to vibrate and generate heat.

Thus, the correct answer is option (a).

Difficulty Level- Hard

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**Q32) Which of the following is an example of a natural source of heat?**

a) Candle flame

b) Electric heater

c) Sun

d) Gas stove

Correct Answer: Option (c)

Explanation: The sun is a natural source of heat as it is a massive, self-luminous star that emits a tremendous amount of heat and light. This heat and light is generated through the process of nuclear fusion, which takes place at the sun's core. The energy that is produced during this process is then radiated outwards in the form of electromagnetic radiation, including heat and light. This radiation reaches the earth's surface and warms it, providing a source of natural heat.

Thus, the correct answer is option (c).

Difficulty Level- Easy

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**Q33) Which of the following is an example of a device that uses radiation to transfer heat?**

a) Electric heater

b) Oven

c) Air conditioner

d) Microwave

Correct Answer: Option (d)

Explanation: A microwave oven is a kitchen appliance that uses electromagnetic radiation in the form of microwaves to heat up food. When the microwave oven is turned on, the microwaves are generated by an electronic vacuum tube called a magnetron. These microwaves are then directed into the oven and absorbed by the food, specifically by the water molecules present in the food.

Thus, the correct answer is option (d).

Difficulty Level- Medium

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**Q34) Which of the following methods of heat transfer occurs in solids?**

a) Convection

b) Radiation

c) Conduction

d) None of the above

Correct Answer: Option (c)

Explanation: Conduction is a mode of heat transfer that takes place when there is a temperature difference between two objects or substances that are in direct contact with each other. In solids, the heat energy is transferred through the collisions between molecules, where the molecules with higher kinetic energy collide with the molecules with lower kinetic energy and transfer energy to them.

Thus, the correct answer is option (c).

Difficulty Level- Hard

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**Q35) Which of the following is an example of convection?**

a) Heat from the sun warming the earth's surface

b) Touching a hot stove and feeling the heat

c) Ice melting in a glass of water

d) Water boiling in a pot on the stove

Correct Answer: Option (d).

Explanation: Convection is the transfer of heat by the movement of a fluid or gas. When water is heated in a pot on the stove, it becomes less dense and rises to the top of the pot. As it rises, cooler water flows in to take its place, and this process continues until the entire pot of water is heated. This is an example of convection. Heat from the sun warming the earth's surface is an example of radiation, touching a hot stove and feeling the heat is an example of conduction, and ice melting in a glass of water is an example of phase change.

Thus, the correct answer is option (d).

Difficulty Level- Medium

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**Q36) Which of the following is not a safety measure that should be taken during an earthquake?**

a) Standing near a window

b) Hiding under a sturdy table

c) Taking cover under a strong door frame

d) Staying away from tall buildings and power lines

Correct Answer: Option (a)

Explanation: During an earthquake, it is important to take safety measures to protect yourself from falling debris and collapsing structures. Standing near a window is dangerous as the glass can break and cause injuries. It is recommended to take cover under a sturdy table, door frame, or in a safe open area away from tall buildings and power lines.

Thus, the correct answer is option (a).

Difficulty Level- Medium

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**Q37) What is the Richter scale used to measure?**

a) Earthquake intensity

b) Wind speed

c) Temperature

d) Rainfall

Correct Answer: Option (a)

Explanation: The Richter scale is used to measure the intensity of an earthquake. It is a logarithmic scale that measures the amount of energy released during an earthquake. The higher the number on the Richter scale, the more intense the earthquake.

Thus, the correct answer is option (a).

Difficulty Level- Medium

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**Q38) Answer the following question with reference to the Audio**

<https://drive.google.com/file/d/1STROal9W_iUx_A-umf4TTKtORTmbtRWf/view?usp=share_link>

**TYPE: Audio**

**How can scientists use earthquake data to learn about the earth's interior?**

a) By measuring the magnitude of earthquakes

b) By studying the damage caused by earthquakes

c) By analysing the seismic waves generated by earthquakes

d) By tracking the path of earthquakes as they travel around the world

Correct Answer: Option (c)

Explanation: When an earthquake occurs, it generates seismic waves that travel through the earth's interior. These seismic waves can be detected and measured by seismometers placed on or near the earth's surface. Scientists use this data to study the earth's interior, as different types of seismic waves travel through different layers of the earth at different speeds.

Thus, the correct answer is option (c).

Difficulty Level- Hard

$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$**Q39Q39) Which of the following statements about P-waves and S-waves is correct?**

a) P-waves can only move through solids, while S-waves can move through both solids and liquids

b) S-waves are faster than P-waves

c) P-waves cause more damage than S-waves

d) S-waves are also known as primary waves

Correct Answer: Option (a)

Explanation: P-waves (or primary waves) are a type of seismic wave that move through the Earth's interior and can travel through solids, liquids, and gases. They are the fastest type of seismic wave and are the first waves to be detected by seismometers after an earthquake occurs. P-waves move in a compressional motion, causing particles to vibrate back and forth in the same direction as the wave's motion.

Thus, the correct answer is option (a).

Difficulty Level- very Hard

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**Q40) Answer the following question with reference to the image**

<https://drive.google.com/file/d/1TZErnJ64S7c_Nqp79MJJFz4VkEhOKh4L/view?usp=share_link>

**TYPE: Image**

**Which of the following is a building design feature that can help reduce damage from earthquakes?**

a) Wide, shallow foundations

b) Concrete walls without reinforcement

c) Large, open rooms with no dividers

d) Steel reinforcement bars in concrete

Correct Answer: Option (d)

Explanation: Steel reinforcement bars in concrete. Reinforcing concrete structures with steel bars can help the building withstand the shaking and stresses caused by an earthquake. This is a common design feature in earthquake-resistant buildings

Thus, the correct answer is option (d).

Difficulty Level- Hard

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