

CLASS 8TH GENERAL SCIENCE REVISION FOR 2ND SEMESTER EXAM

Q1. Fill in the blanks with correct alternative.(4)

1. The end stage of the Sun will be a white dwarf .
2. Rivers, ponds and oceans are aquatic ecosystems.
3. Milky way is a spiral galaxy.
4. Stars are gigantic spheres of hot gas.
5. Man is a consumer in an ecosystem.
6. The working of a kaleidoscope is based on the properties of reflection of light.
7. Vacuoles maintain the osmotic pressure of the cell.
8. Alkali silicate or water glass dissolves in water.
9. Motor cars are coated with Teflon .
10. Medium is needed (or necessary) for generation of sound.

Q2. Match the pairs. (4)

Group 'A' – ANSWER

1. Temperature of a healthy human body - b. 98.6 °F
2. Boiling point of water - d. 212 °F
3. Room temperature - a. 296 K
4. Freezing point of water- c. 0°
5. Cactus - d. Desert
6. Aquatic plants - c. Aquatic
7. Mangroves - b. Creek
8. Pine - a. Forest
9. Rusting of iron - chemical change
10. pH of oxygenated blood - 7.4
11. Oxygen - reactant in respiration
12. Blood donation - 350 ml

Q3. True or False ? (4)

1. The joule is the unit of heat. - True
2. Stars are born out of interstellar clouds - True
3. Combustion of fuel is a fast and irreversible man-made chemical change. - True
4. Electronic configuration of chlorine is 2, 8, 6. - False
5. Only light can emit from the black hole. - False
6. The Sun will pass through the supergiant stage during its evolution. - False
7. Plastics are inorganic polymers that show plasticity - False
8. Polythene, PVC are thermosetting plastic materials. - False
9. Man is a consumer in an ecosystem. - True
10. Thermocol is made from polystyrene. - True

Q4. Write two types of the following. (4)

1. Plastic - Thermoplastic , Thermosetting plastic
2. Reflection of light - Regular reflection of light , Irregular reflection of light
3. Chemical abiotic factors - Inorganic substances , Organic substances
4. Biotic factors - Producers, Consumers, Decomposers
5. Abiotic factors - Physical , Chemical
6. Biomes - Land biomes , Aquatic Biomes

7. Types of Glass - Silica glass , Lead glass
8. Thermoplastic - PVC , PS
9. Thermosetting plastic - Bakelite , Polyester

Q5. Write the chemical names from given formulae.(4)

1. Ca(OH)_2 – Calcium hydroxide
2. H_2SO_4 – Sulphuric acid
3. HCl – Hydrochloric acid
4. NaOH – Sodium hydroxide
5. KOH – Potassium hydroxide
6. NH_4OH – Ammonium hydroxide

Q6. Find the odd one out. (4)

1. Teak, Parthenium, Pine, Sandalwood
2. Bakelite, Melamine, Polystyrene, Polyester.
3. Sitar, Violin, Guitar, Flute.
4. Hyena, Cow, Deer, Rabbit
5. Teflon, Polyacrylic, Fibreglass, Polyester.
6. Lime, litmus, phenolphthalein, methyl orange.
7. Acetic acid, carbonic acid, hydrochloric acid, nitric acid
8. Citric acid, formic acid, lactic acid, nitric acid.

Q7. Classify the following. (6)

Producers	Primary consumers	Secondary consumers	Tertiary consumers	Decomposers
Dipterocarpus, Teak, Pine, Sandalwood	Ant, Grasshopper, Spider, Butterfly	Snake, Bird, Lizard, Jackal	Tiger, Falcon, Cheetah	<i>Aspergillus</i> , <i>Polycarpus</i>

Producers	Primary Consumes	Secondary Consumes	Tertiary Consumes	Decomposers
<i>Aquatic plants</i> , <i>Azolla</i> , <i>Nitella</i> , <i>Hydrilla</i> , <i>Typha</i> , <i>Pistia</i> , <i>Eichhornia</i>	<i>Aquatic insects</i> , <i>Snails</i> <i>Annelids</i>	<i>Frogs</i> , <i>Small fishes</i>	<i>Crocodiles</i> , <i>Hérons</i> , <i>Large fishes</i>	<i>Bacteria</i> , <i>fungi</i>

Producers	Primary consumers	Secondary consumers	Tertiary consumer	Decomposers
<i>Parthenium</i> , <i>Cynodon</i> , <i>Kusuli</i>	Cow, deer, rabbit, <i>Leptocorsia</i> ,	Snakes, Birds, Jackals, Wolf,	Lion, Hyena, Vulture, Kite,	<i>Fusarium</i> <i>Aspergillus</i>

Q8. Do as directed.(20) (4 MARKS EACH)

A: What are the three end stages of stars?

1. Stars having initial mass less than 8 times the mass of the Sun ultimately become white dwarfs.

2. Stars having initial mass between 8 and 25 times the mass of the Sun ultimately become neutron stars.
3. Stars having initial mass larger than 25 times the mass of the Sun ultimately turn into black holes.

B: Why do stars evolve?

1. Although stars appear stable for quite a long period of time, their properties do change, though very slowly.
2. A change in the properties of a star, leading to its passing through different stages, is called evolution of the star.
3. Burning of the fuel at the centre of the star and a gradual decrease in its amount is the main reason of evolution of a star.

C: Give scientific reasons: Microbes are called decomposers.

1. Decomposition is the process in which the organic compounds are broken down to their inorganic constituents.
2. The organic substances such as carbohydrates, proteins and lipids which are locked in the dead remains of plants and animals are converted into hydrogen, oxygen, calcium, iron, sodium, potassium, etc. by microbes.
3. Therefore, microbes are called decomposers.

D. Give scientific reasons : Rails have gaps at specific distances.

1. A small gap is kept between rails at regular intervals.
2. This is kept to accommodate the change in the length of the rails with change in temperature.
3. If this gap is not kept, then the rails will get distorted due to expansion in summer which may lead to accidents.

E: Give my information: Biome

1. In some regions on earth, a large area has the same climate and abiotic factors.
2. So a specific ecosystem develops in a vast area. Such large ecosystems are called 'Biomes'.
3. These biomes contain many small ecosystems. Earth itself is a vast ecosystem.
4. Two types of biomes are found on the earth. i. Land biomes ii. Aquatic biomes

F: Give my information: Ecosystem

1. There is a continuous interaction between living and non-living factors.
2. Living organisms and their habitat, environment are correlated with each other.
3. The structure which is formed due to these reciprocal relationships is called an ecosystem.
4. Biotic and abiotic factors and their interactions form an ecosystem.

G: State the laws of reflection of light.

There are three laws of reflection. These are as given below.

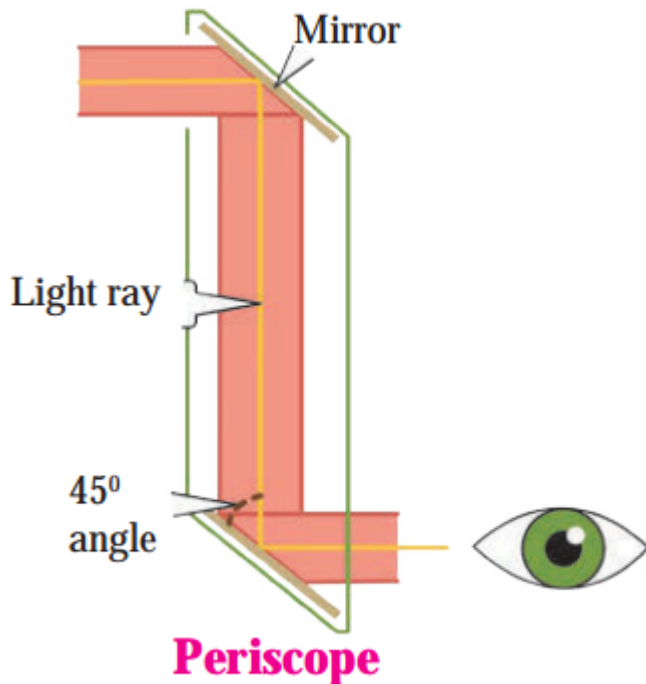
1. The angle of reflection is equal to the angle of incidence.
2. The incident ray, the reflected ray and the normal lie in the same plane.
3. The incident ray and the reflected ray are on the opposite sides of the normal.

H: Which health parameters of blood donors should be checked?

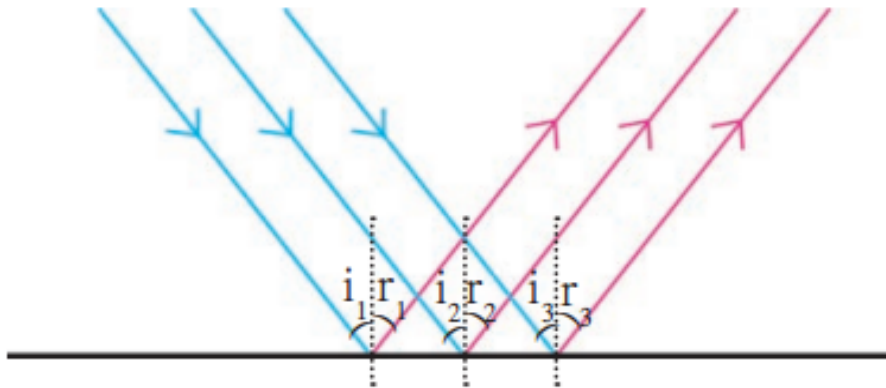
1. Blood donor should be healthy.
2. He or she should have good hemoglobin's content.
3. The RBC and WBC count should also be normal.
4. They should not carry any parasites in their blood such as malarial parasite or dengue virus.

5. The donor should not be HIV positive or should not have any infectious diseases.
6. He should not have any addictions such as drug-abuse or alcohol consumption.

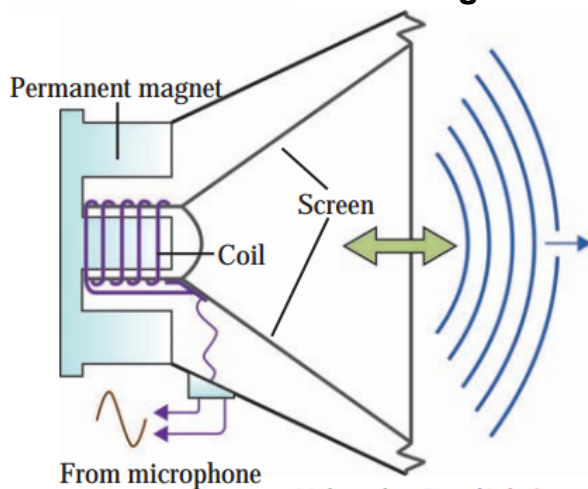
I: Draw neat and labeled diagrams : Periscope



J: Draw neat and labeled diagram : Regular reflection of light



K: Draw neat and labeled diagram : Internal construction of a loudspeaker



L: Draw neat and labeled diagram :Effect of heat on a gas