

# General Science Mega Quiz for SSC and RRB NTPC (Solutions)

#### S1. Ans.(b)

**Sol.** Adrenaline is commonly known as the 'fight or flight hormone'. Adrenaline is a hormone released from the adrenal glands and its major action together with nor-adrenaline is to prepare the body for fight or flight.

#### S2. Ans.(b)

**Sol.** Ginger::Rhizome Potato::Tuber Onion ::Bulb

### S3. Ans.(c)

**Sol.** Itai-Itai disease is caused by prolonged poisoning of cadmium. The first documented occurrence of mass cadmium poisoning in the world occurred in 1950 in Toyama Prefecture in Japan. However, for the first time, the disease was reported in 1912.

## S4. Ans.(d)

**Sol.** Leukaemia is a type of cancer that usually begins in the bone marrow and result in a high number of abnormal white blood cells. Symptoms may include bleeding and bruising problems, feeling tired, fever and an increased risk of infection. The diagnosis is typically made by blood tests or bone mar row biopsy.

#### S5. Ans.(d)

#### Sol.

The correctly matched list is:

Plague	-	Bacteria
AIDS	-	Virus
Baldness	-	Fungus
Malaria	-	Protozoa

## S6. Ans.(d)

**Sol.** Nitrogen is a chemical element with symbol N and atomic number 7. It was first discovered and isolated by Scottish physician Daniel Rutherford in 1772.

#### S7. Ans.(a)

**Sol.** A Geiger counter (Geiger-Muller tube) is a device used for the detection and measurement of all types of radiation alpha, beta and gamma radiation.



# S8. Ans.(d)

**Sol.** According to Ohm's law, if there is a potential difference (V) across a resistor then there is a current (I) flowing through it. Current flows in a circuit as a result of difference in potential between two points in the circuit.

# S9. Ans.(b)

**Sol.** Cyclotron is a machine used to accelerate charged particle such as alpha particles, deuteron, proton etc. up to a very high speed.

## S10. Ans.(b)

**Sol.** A hygrometer is an instrument used for measuring the water vapour (humidity) in the atmosphere.

## S11. Ans.(a)

**Sol.** Peristalsis is a particular, wave-like kind of muscle contraction because its purpose is to move solids or liquids along within the tube-like structures of the digestive and urinary tracts.

## S12. Ans.(b)

**Sol.** The inner lining of stomach is protected by mucus.Mucus produced in the stomach forms a layer on the cells of the stomach preventing them directly coming in contact with acid in the stomach. Mucus also helps in easy movement of partially digested food into the small intestine.

#### S13. Ans.(d)

**Sol.** A capillary is a small blood vessel from 5 to 10 micrometres (µm) in diameter, and having a wall one endothelial cell thick. They are the smallest blood vessels in the body: they convey blood between the arterioles and venules.

## **S14.** Ans. (b)

**Sol.** Neutron is a neutral particle which has no electrical change. It was discovered by Chadwick in 1932. He discovered that when Beryllium (Be) or other atoms are bombarded with high speed particles, then electrically neutral particles emerges from these atoms and such neutral particles are known as neutrons.

## S15. Ans.(a)

**Sol.** The equivalent of NaCl will be equal to equivalent weight of Na + equivalent weight of Cl

= 23+35.5 =58.5 grams. molecular weight of NaCl also 58.5 grams.

## S16. Ans.(c)

**Sol.** A Geiger counter is an instrument used for detecting and measuring ionizing radiation. Also known as a Geiger-Mueller counter (or Geiger-Müller counter), it is widely used in applications such as radiation dosimetry, radiological protection, experimental physics, and the nuclear industry.



# S17. Ans.(b)

**Sol.** An atom is the smallest constituent unit of ordinary matter that has the properties of a chemical element according to the every solid, liquid, gas, and plasma is composed of neutral or ionized atoms. Atoms are extremely small; typical sizes are around 100 picometers.

# S18. Ans.(a)

**Sol.** Polycot is a mixture of Polyester and cotton.

## S19. Ans.(c)

**Sol.** Polyethylene, polypropylene, polyvinyl chloride, polystyrene, polybenzimidazole, acrylic, nylon and Teflon are examples of thermoplastics.

### S20. Ans.(d)

Sol. Mn, Hg does NOT follow New lands Law of Octaves.

### S21. Ans.(b)

**Sol.** The processes which maintain body functions and are necessary for survival are called life processes. The important life processes are nutrition, transportation, metabolism, reproduction, respiration, and excretion.

#### S22. Ans.(b)

**Sol.** The inner lining of stomach is protected by mucus.Mucus produced in the stomach forms a layer on the cells of the stomach preventing them directly coming in contact with acid in the stomach. Mucus also helps in easy movement of partially digested food into the small intestine.

## S23. Ans.(c)

**Sol.** Characteristics refers to appearance, behavior and particular function in classification of organisms.

## S24. Ans.(b)

**Sol.** Pancreatic juice required alkaline medium for their actions, the food coming from the stomach are acidic in nature bile juice help to make the acidic foods coming from the stomach alkaline so that pancreatic juice can digest food easily

## S25. Ans.(c)

**Sol.** When the ice melts to liquid water, the structure collapses and the density of the liquid increases. At temperatures well above freezing, the molecules move faster and get further apart. The density decreases as temperature increases thus, the density of water is a maximum at 4 °C.

#### S26. Ans.(a)

**Sol.** The impulse-momentum theorem states that the change in momentum of an object equals the impulse applied to it.

### S27. Ans.(d)

**Sol.** The Orbital Motion Interactive is simulates the elliptical motion of a satellite around a central body. In this type of motion axis of the rotation does not pass through the object.

#### S28. Ans.(d)

**Sol.** Alkali metals have one electron in their outer shell so alkali metal can easily lose electrons.

#### S29. Ans.(d)

**Sol.** Aromatic hydrocarbons contain at least one benzene like ring in their molecules.

#### S30. Ans.(c)

**Sol.** Chromite is the only ore of chromium, a metal essential for making stainless steel, nichrome, chromeplating, pigments, refractories, chemicals and pharmaceuticals.



