

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

# S1. Ans.(c)

**Sol.** The Intensity of waves is defined as the power delivered per unit area of a Wave.

# S2. Ans.(a)

Sol. Lucimeter is an instrument used for measuring light intensity.

# S3. Ans.(a)

Sol. Electric motors operating at low voltage tend to burn out because they draw more current which is inversely proportional to the voltage.

### S4. Ans.(c)

**Sol.** A parachute descends slowly because it has a larger surfaace area and air resistance is more.

# S5. Ans.(a)

**Sol.** A vast collection of stars held together by mutual gravitation is called a Galaxy.

# S6. Ans.(a)

Sol. Digestion of some fats can begin in the mouth where lingual lipase breaks down some short chain lipids into diglycerides. However fats are mainly digested in the small intestine.

### S7. 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.

# S8. 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.

### S9. 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.



# S10. Ans.(a)

**Sol.** The main respiratory surface in humans is the alveoli. Alveoli are tiny balloon like structures with very thin walls. They have numerous tiny thin walled blood vessels in direct contact with them. It is within the lungs.

# S11. Ans.(d)

**Sol.** Benoit Fourneyron is the Inventor of Water Turbine.

# S12. Ans.(c)

**Sol.** The Intensity of waves is defined as the power delivered per unit area of a Wave.

# S13. Ans.(d)

**Sol.** PlayStation was the brainchild of Ken Kutaragi, a Sony executive who had just finished managing one of the company's hardware engineering divisions at that time and would later be dubbed as "The Father of the PlayStation".

# S14. Ans.(a)

**Sol.** Lucimeter is an instrument used for measuring light intensity.

# S15. Ans.(b)

**Sol.** The absorption of ink by blotting paper involves Capillary action phenomenon.

# S16. Ans.(d)

**Sol.** Carbon di oxide contributes the maximum to the phenomena of global warming. The increase in atmospheric Carbon di oxide and other greenhouse gases has increased the amount of infrared radiation absorbed and re-emitted by these molecules in the atmosphere and thus increases temperature.

# S17. Ans.(a)

There are 2 types of street light bulbs are used by municipalities. They are sodium vapor and mercury vapor bulbs. The mercury vapor bulbs are usually a white ambient light and sodium on orange/yellow light.

# S18. Ans.(b)

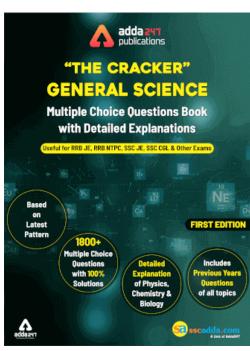
**Sol.** The color of light is determined by its wavelength. Different colors have different wavelengths. The wavelength of red colour is largest and violet colour has shortest wavelength.

### S19. Ans.(d)

**Sol.** Due to the refraction of light, the sun is visible to us a few minutes before sunrise and a few minutes after sunset.

### S20. Ans.(a)

**Sol.** The concept of expanding universe is based on Doppler effect. It was named after Christian Doppler, who first came up with the idea in 1942. Edwin Hubble used the Doppler Effect to determine that universe is expanding. Hubble found that the light from distant galaxies was shifted towards lower frequencies, to the red end of the spectrum. This is known as a red Doppler shift or a red-shift.



### S21. Ans.(c)

**Sol.** Ecology – Study of interrelationship between organisms and environment.

Genetics – Study of heredity and variation.

Demography – statistical study of populations including human beings.

Virology – Study of viruses.

# S22. Ans.(c)

Sol. Apiculture – Rearing bess

Horticulture – Study of fruit and flower producing plants

Sericulture - Rearing silk worm

Floriculture - Study of flowers for decoration work

# S23. Ans.(d)

**Sol.** Olericulture is the science of vegetable growing, dealing with the culture of non-woody (herbaceous) plants for food.

# S24. 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.

# S25. 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.

### S26. Ans.(a)

Sol. Measles is a highly contagious virus that lives in the nose and throat mucus of an infected person. It can spread to others through coughing and sneezing. Also, measles virus can live for up to two hours in an airspace where the infected person coughed or sneezed.

### S27. Ans.(d)

**Sol.** Ethyl acetate is a colourless liquid at room temperature with a pleasant "fruity" smell.

### S28. Ans.(a)

Sol. Propanal is an aldehyde that consists of ethane bearing a formyl substituent.

### S29. Ans.(c)

Sol. The elements classified as metalloids are boron, silicon, germanium, arsenic, antimony, tellurium, and polonium.

# S30. Ans.(b)

Sol. J.J. Thomson helped revolutionize the knowledge of atomic structure by his discovery of the electron (1897).

