

# General Science Mega Quiz for SSC Tier-1 (Solutions)

# S1. Ans.(d)

### Sol.

- Haematite is not a form of carbon.
- It is an ore of iron.

# **S2.** Ans.(a)

#### Sol.

- In lead pencils, lead is 0%.
- In lead pencils, graphite is used.

### S3. Ans.(a)

**Sol.** Allopathy is a medical practice which involves the treatment of diseases by using synthetic drug or chemicals.

# **S4.** Ans.(d)

#### Sol.

Boron behaves chemically both as metal and non metal.

It belongs to the 13th group of the periodic table.

### **S5.** Ans.(a)

Sol. Oxygen was discovered by Carl wilhem scheele in 1772 and Joseph Priestley in 1774 but Priestley is given priority because his work was published first, but it is not given in options.

# **S6.** Ans.(a)

**Sol.** Bleaching liquors are inorganic pollutants produced mainly by paper and pulp industry.

# S7. Ans.(b)

#### Sol.

- Yeast cell's convert sugar solution into alcohol by fermentation.
- Invertase and zymase enzymes participate in this process.

# S8. Ans.(d)

- Food preservatives prevent spoilage of food due to microbial growth.
- Example:---- Sodium benzoate.

# S9. Ans.(a)

#### Sol.

- Tajmahal is affected by acid rain which mainly contains H2SO4 and HNO3.
- SO2 and NO2 react with rain water to form H2SO4 and HNO3 respectively.



# S10. Ans.(d)

**Sol.** Spirit gives cooling sensation in contact with the body because it is highly volatile and evaporates the water from body.

# S11. Ans.(a)

#### Sol.

- The electromagnetic spectrum is in order of increasing frequencies:--
- Radiowaves, microwave, infrared waves, visible light, ultraviolet waves, X-ray, and Gamma ray.

# S12. Ans.(d)

#### Sol.

- The smaller the wavelength the larger will be the deviation.
- As the Red light has largest wavelength, it deviates the least.

# S13. Ans.(a)

#### Sol.

- Velocity of the sound wave depends upon the temperature, density of medium in which it is traveling.
- It also depends on moisture content in medium.

# S14. Ans.(c)

#### Sol.

- The layer of the atmosphere that reflects radio waves is the ionosphere.
- The ionosphere is defined as the layer of the earth's atmosphere that is ionized by solar and cosmic radiation.

# S15. Ans.(b)

Sol. Sonar is used to navigate, communicate with or detect objects in or under the surface of water.

# S16. Ans.(d)

**Sol.** Laser is a coherent, monochromatic unidirectional beam of light.

# S17. Ans.(c)

#### Sol.

- The S.I UNIT of frequency is Hertz.
- 1 Hertz is defined as the one cycle per second.
- It is named after Heinrich Rudolf Hertz.

#### S18. Ans.(b)

**Sol.** These colors are often observed as light passes through a triangular prism. Upon passage through the prism, the white light is separated into it's component color's.-red, orange, yellow, green, blue and violet.

The separation of visible light into it's different colors is known as dispersion.

### S19. Ans.(c)

#### Sol.

- Rate of change of momentum is equal to the force with respect to time..
- Momentum=mv.

# S20. Ans.(c)

#### Sol.

- Centrifugal force is an inertial force that is acted upon an object moving in a curved path.
- It acts outwardly away from the centre of rotation.

# S21. Ans.(c)

**Sol.** Atomic number is the number of protons present in nucleus of an atom.

It is represented by Z.

# S22. Ans.(b)

**Sol.** In nuclear reactor neutrons are slowdown by the moderator.

The most commonly used moderators are the ordinary water and Graphite.

# S23. Ans.(c)

**Sol.** Aluminium oxide is an Amphoteric oxide. Because it behaves as an acid in the presence of the base and behaves as the base in the presence of an acid.

### S24. Ans.(d)

**Sol.** Solid carbon dioxide is known as Dry ice.

Dry ice shows sublimation.

It is used for making cold baths, used as coolant for preserving perishable articles in food industry.

# S25. Ans.(d)

Sol. Denatured spirit or denatured alcohol is commercial ethyl alcohol to which small amounts of very poisonous substances like Pyridine or Methyl alcohol has been added.

### S26. Ans.(a)

**Sol.** Methyl alcohol or, methanol is known as the wood spirit.

It is also known as wood alcohol because it was formerly obtained by the destructive distillation of wood.

# S27. Ans.(c)

**Sol.** Kmno4 can be used as a disinfectant.

It is used to purify well water.

It is commonly known as Red Medicine or Lal Dawa.

#### S28. Ans.(d)

**Sol.** Fabric made from polyester doesn't get wrinkled easily because it has high wrinkle resistant.

#### S29. Ans.(c)

**Sol.** Salt is obtained by the evaporation of seawater as seawater contains sodium chloride, magnesium chloride etc.

#### S30. Ans.(d)

**Sol.** Atomic explosion is triggered by uncontrolled chain reaction.

