

# General Awareness Sunday Mega Quiz for RRB NTPC (Solutions)

### **S1.** Ans.(b)

**Sol.** Kidneys remove excess organic molecules from the blood. They serve the body as a natural filter of the blood and remove water-soluble wastes, such as urea and ammonium and they are also responsible for the reabsorption of water, glucose and amino acids.

#### S2. Ans.(b)

**Sol.** Kidneys are the most important organ in our body. Our kidneys purify around 1500 litre of blood and convert it into approximately 1.5 litre urine per day. 1200 ml of blood flows through both the kidneys per minute and out of it 1 ml of urine is formed per minute.

#### S3. Ans.(d)

**Sol.** Metabolism refers to all of the body's chemical process, the digestion of food and the elimination of waste. The main nitrogenous wastes are urea and uric acid. Urea is formed from gluconeogenesis of amino acids. Urea is one of the primary components of urine.

### **S4.** Ans.(c)

**Sol.** Tetanus is a bacterial disease caused by the bacteria Clostridium tetani. When the tetanus bacteria invade the body through a wound, they produce a toxin or poison, that causes muscles to become tight, which is very painful. Tetanus mainly affects the neck and abdomen. It is also known as "lock jaw" because it often causes a person's neck and jaw muscles to lock, making it hard to open the mouth or swallow.

#### S5. Ans.(a)

**Sol.** Filariasis is a parasitic infection caused by thread-like nematodes (filariae) that belong to the

roundworm superfamily Filarioidea. The disease spreads from person to person by female Culex mosquito. Edema is one of the most common symptoms of filariasis and can lead to elephantiasis, which is characterized by thickened skin and massive swelling.

# **S6. Ans.(b)**

#### Sol.

Cataract – Eye
Jaundice – Liver
Typhoid – Intestine
Pneumonia – Lungs



#### S7. Ans.(a)

Sol. The term broad-spectrum antibiotic refers to an antibiotic that acts against a wide range of diseasecausing bacteria. Broad-spectrum antibiotic acts against both Gram-positive and Gram-negative bacteria, in contrast to a narrow-spectrum antibiotic, which is effective against specific-chloramphenicol is also known as chloronitromycin. It is a broad-spectrum antibiotic drug used against serious infections such as typhoid fever.

#### **S8.** Ans.(d)

**Sol.** Dental plaque is a biofilm or mass of bacteria that grows on surface within the mouth. It appears as a white/pale yellow "slime layer" commonly found in between the teeth and along the cervical margins. Plaques formed on teeth are made up of food particles, saliva, mouth acids and bacteria in the oral cavity.

#### **S9.** Ans.(d)

**Sol.** Teeth and bones both are hard, white and heavy. Teeth are composed of calcium, phosphorous and other minerals. Bones contain calcium, phosphorus, sodium and other minerals, but mostly consist of the protein collagen.

#### **S10.** Ans.(b)

**Sol.** Fallopian tube, also called oviduct or uterine tube, either of a pair of long narrow ducts located in the human female abdominal cavity that transport the male sperm cells to the egg, provide a suitable environment for fertilization and transport the egg from the ovary, where it is produced.

#### S11. Ans.(a)

**Sol.** Enrico Fermi was an Italian-American physicist and the creator of the world's first nuclear reactor, the Chicago Pile-1. He has been called the "architect of the nuclear age" and the "architect of the atomic bomb".

### S12. Ans.(c)

**Sol.** Whenever a force is applied to an object, causing the object to move, work is done by the force. Work

done due to displacement caused by a force is a scalar quantity. Work can be either positive or negative. The unit of work is the unit of energy, the joule (J). 1 J = 1 N m.

### \$13. Ans.(a)

**Sol.** When a beam pass of parallel light rays is incident on a smooth and plane surface, the reflected rays will also be parallel. This type of reflection is called Regular Reflection.

### S14. Ans.(b)

**Sol.** If the radius of the earth decreases and its mass remains the same, then the value of "acceleration due to gravity" will increase.



#### **S15.** Ans.(c)

**Sol.** Nicolaus Copernicus was a Polish astronomer who put forth the theory that the Sun is at rest near the center of the Universe, and that the Earth, spinning on its axis once daily, revolves annually around the Sun. This is called the heliocentric, or Sun-centered, system. Copernican heliocentrism is the name given to the astronomical model developed by Nicolaus Copernicus and published in 1543.

#### **S16.** Ans.(a)

**Sol.** In absolute vacuum, there are no particles, no material medium, nothing. So, there is no reflection, refraction, diffraction, etc. That is why it travels the fastest in vacuum.

#### \$17. Ans.(c)

**Sol.** The SI unit for measuring an electric current is the ampere, which is the flow of electric charge across a surface at the rate of one coulomb per second. Electric current is measured using a device called an ammeter.

#### S18. Ans.(b)

**Sol.** The Siemens (symbol S) is the derived unit of electric conductance.

### S19. Ans.(c)

**Sol.** Universal Standard time, as originally proposed by Scottish-Canadian Sir Sandford Fleming in 1879, divided the world into twenty-four time zones, each one covering 15 degrees of longitude.

#### **S20.** Ans.(c)

**Sol.** The radius of curvature of plane is infinity

#### S21. Ans.(a)

**Sol.** Crystallisation is an example of physical change.

### S22. Ans.(b)

**Sol.** The reaction between baking soda (sodium bicarbonate) and vinegar (dilute acetic acid) generates carbon dioxide gas.

### **S23.** Ans.(b)

**Sol.** Brass consists 68–71% Copper and rest is Zinc. Bronze consists 88% Copper and 12% Tin. German silver has almost 50% Copper. Delta consists 60% Copper, 38% Zinc,2% Fe.

#### **S24.** Ans.(a)

**Sol.** 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.

#### **S25.** Ans.(b)

**Sol.** Hydro electricity is often known as White coal.

### S26. Ans.(d)

**Sol.** The resources which can be used continuously, year-after are called Renewable resources.

## S27. Ans.(a)

**Sol.** The following metals imparts different colour to glasses-Cobalt oxide: deep blue colour; copper oxide: turquoise; chromium: dark green to black; cadmium sulphide: deep yellow etc.

### S28. Ans.(c)

**Sol.** A fluorescent lamp or fluorescent tube is a gas discharge lamp that uses electricity to excite mercury vapour. It contains Mercury Vapour and Argon.

## S29. Ans.(a)

**Sol.** Nila thotha is a compound of Copper and sulphate. Its chemical formula is CuSO4.5H2O.

### S30. Ans.(c)

**Sol.** The organic compounds are a large class of chemical compounds in which one or more atoms of carbon are covalently linked atoms of other elements, most commonly Hydrogen, Oxygen or Nitrogen.



