

[www.amkresourceinfo.com](http://www.amkresourceinfo.com)



## Basic Science – Q Bank

### Q BANK 1

1. Which of the following is the lightest metal ?  
(A) Mercury (B) Silver  
(C) Lithium (D) Lead (**Ans : C**)
2. The most important ore of Aluminium is–  
(A) Bauxite (B) Calamine  
(C) Calcite (D) Galena (**Ans : A**)
3. The element present in the largest amount in rocks and minerals is–  
(A) Carbon (B) Silicon  
(C) Hydrogen (D) Aluminium (**Ans : B**)
4. The chemical name of Urea is–  
(A) Aneurin (B) Chloroetane  
(C) Carbamide (D) None of these (**Ans : C**)
5. Permanent hardness of water can be removed by adding–  
(A) Potassium Permanganate (B) Chlorine  
(C) Bleaching Powder (D) Washing Soda (**Ans : D**)
6. The formula of Plaster of Paris is–  
(A)  $\text{CaSO}_4$  (B)  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$   
(C)  $2\text{CaSO}_4 \cdot 4\text{H}_2\text{O}$  (D)  $2\text{CaSO}_4 \cdot \text{H}_2\text{O}$  (**Ans : D**)
7. Liquefied Petroleum gas (LPG) consists of mainly–  
(A) Methane, Ethane and Hexane (B) Ethane, Hexane and Nonane  
(C) Methane, Butane and Propane (D) Methane, Hexane and Nonane (**Ans : C**)

8. The metal that is present in Photo Films is–  
(A) Mercury (B) Platinum  
(C) Magnesium (D) Silver (**Ans : D**)
9. Which of the following is in liquid form at room temperature ?  
(A) Cerium (B) Sodium  
(C) Francium (D) Lithium (**Ans : C**)
10. The property of a substance to absorb moisture from the air on exposure is called–  
(A) Osmosis (B) Desiccation  
(C) Efflorescence (D) Deliquescence (**Ans : D**)
11. Brass gets discoloured in air due to the presence of which gas in air–  
(A) Carbon dioxide (B) Oxygen  
(C) Hydrogen Sulphide (D) Nitrogen (**Ans : C**)
12. Quartz crystals normally used in quartz clocks etc. is chemically–  
(A) Sodium Silicate (B) Silicon dioxide  
(C) Germanium dioxide (D) A mixture of (B) and (C) (**Ans : B**)
13. Which of the following elements is non-radioactive?  
(A) Uranium (B) Thorium  
(C) Plutonium (D) Zirconium (**Ans : D**)
14. According to Dalton's atomic theory the smallest particle which can exist independently is–  
(A) An atom (B) A molecule  
(C) A cation (D) An anion (**Ans : A**)
15. The recent atomic weight scale is based on–  
(A)  $^1\text{H}^1$  (B)  $^1\text{H}^2$   
(C)  $^{12}\text{C}^{12}$  (D)  $^{16}\text{O}^{16}$  (**Ans : C**)
16. The major ingredient of leather is–  
(A) Carbohydrate (B) Collagen  
(C) Polymer (D) Nucleic acid (**Ans : B**)

17. Glass is made from the mixture of–  
(A) Quartz and mica (B) Sand and salt  
(C) Sand and silicates (D) None of these (**Ans : C**)
18. Epoxy resins is used as–  
(A) Moth repellants (B) Insecticides  
(C) Detergents (D) Adhesives (**Ans : D**)
19. One fathom is equal to–  
(A) 6 metres (B) 6 feet  
(C) 60 feet (D) 60 cms (**Ans : B**)
20. What is the unit for measuring the pitch or frequency of sound ?  
(A) Coulomb (B) Hum  
(C) Cycles (D) Decible (**Ans : D**)
21. The fastest acting enzyme in the biological kingdom is–  
(A) lipase (B) amylase  
(C) carboxypeptidase (D) carbonic anhydrase (**Ans : D**)
22. Lightening cause rainfall because–  
(A) It cause combination of oxygen and nitrogen (B) Some of the gas molecules become bigger  
(C) It activate H<sub>2</sub>O molecule (D) Photo–electricity reaction starts (**Ans : C**)
23. Nitrification means–  
(A) Liquifaction of nitrogen (B) Convert the atmospheric nitrogen to effective nitrogen compound.  
(C) Production of nitrogen from air (D) Conversion of nitrogen to nitric acid. (**Ans : B**)
24. Cell membrane is–  
(A) permeable (B) selectively permeable  
(C) semipermeable (D) impermeable (**Ans : C**)

25. Polythene is industrially prepared by the polymerisation of–  
(A) methane (B) styrene  
(C) acetylene (D) ethylene (**Ans : D**)

**Q BANK 2**

1. An alloy used in making heating elements for electric heating devices is–  
(A) Solder (B) Alloysteel  
(C) Nichrome (D) German Silver (**Ans : C**)
2. German Silver is an alloy of–  
(A) Copper, Silver and Nickel (B) Silver, Copper and Aluminium  
(C) Zinc, Copper and Nickel (D) Silver, Zinc and Nickel (**Ans : C**)
3. Air is a/an–  
(A) Compound (B) Element  
(C) Mixture (D) Electrolyte (**Ans : C**)
4. Which of the following substance is a bad conductor of electricity but a good conductor of heat?  
(A) Asbestos (B) Celluloid  
(C) Purspecks (D) Mica (**Ans : D**)
5. Carborandum is–  
(A) Silicon Dioxide (B) Silicon Carbide  
(C) Silicon Nitride (D) Silicon Phosphide (**Ans : B**)
6. Which of the following is the best conductor of electricity ?  
(A) Copper (B) Mica  
(C) Zinc (D) Silver (**Ans : D**)
7. Soda water contains–  
(A) Nitrous acid (B) Carbonic acid  
(C) Carbon dioxide (D) Sulphuric acid (**Ans : C**)
8. Which of the following is basis of the modern periodic table ?  
(A) Atomic mass (B) Atomic number

(C) Atomic size (D) Atomic volume (Ans : B)

9. Of the following metals, which one pollutes the air of a big city ?

(A) Copper (B) Cadmium

(C) Lead (D) Chromium (Ans : C)

10. Bell Metal is an alloy of–

(A) Brass and Nickel (B) Zinc and Copper

(C) Tin and Copper (D) Nickel and Copper (Ans : C)

11. The high temperature superconductors are–

(A) Metal alloys (B) Ceramic oxides

(C) Inorganic polymers (D) Pure rare earth metals (Ans : B)

12. The ingredients of Gun metal are–

(A) Iron, tin (B) Copper, tin

(C) Iron, brass, tin (D) Iron, zinc, titanium (Ans : B)

13. The neutral atom's two isotopes differ in the number of–

(A) Electron shells (B) Protons

(C) Valence electrons (D) Neutrons (Ans : D)

14. Optical fibres are mainly used in–

(A) Communication (B) Weaving

(C) Musical Instruments (D) Food Industry (Ans : A)

15. The first synthetic fibre made by man was–

(A) Rayon (B) Nylon

(C) Polyester (D) Terycott (Ans : B)

16. Polythene is industrially prepared by the polymerization of–

(A) Methane (B) Styrene

(C) Acetylene (D) Ethylene (Ans : D)

17. A mixture of water and alcohol can be separated by–

(A) Filtration (B) Evaporation

(C) Distillation (D) Decantation (Ans : C)

18. A substance which changes readily into vapour without heating is called—

- (A) Efflorescent (B) Synthetic  
(C) Volatile (D) Effervescent (**Ans : C**)

19. German biochemist, Emil Fischer—

- (A) gave Operon model (B) compared the fit between enzyme substrate to lock and key  
(C) proposed the theory of competitive inhibition (D) proposed the feed back inhibition theory (**Ans : B**)

20. Enzymes generally have—

- (A) same pH and temperature optima (B) same pH but different temperature optima  
(C) different pH but same temperature optima (D) different pH and temperature optima  
(**Ans : C**)

21. Coenzyme is—

- (A) always protein (B) often metal  
(C) always inorganic compound (D) often a vitamin (**Ans : D**)

22. Cholesterol is one kind of—

- (A) Saturated fatty acid (B) unsaturated fatty acid  
(C) Steroid (D) Diglyceride (**Ans : A**)

23. Ethyl-alcohol is mixed completely with water. How ethyl alcohol is separated from the mixture ?

- (A) by separation flannel (B) by evaporation  
(C) partial-distillation (D) evaporation of water (**Ans : C**)

24. White vitriol is—

- (A)  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$  (B)  $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$   
(C)  $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$  (D)  $\text{CuSO}_4 \cdot 7\text{H}_2\text{O}$  (**Ans : B**)

25. Combustion is a process by which—

- (A) heat is produced (B) light is produced  
(C) heat and light both are produced (D) None of these (**Ans : C**)

## Q BANK 3

1. Which of the following is the best conductor of Electricity ?

- (A) Ordinary water (B) Sea water  
(C) Boiled water (D) Distilled water (Ans : B)

2. Balloons are filled with–

- (A) Helium (B) Oxygen  
(C) Nitrogen (D) Argon (Ans : A)

3. The charcoal used to decolourise raw sugar is–

- (A) Animal charcoal (B) Sugar charcoal  
(C) Coconut charcoal (D) Wood charcoal (Ans : D)

4. Washing soda is the common name of–

- (A) Calcium Carbonate (B) Calcium Bi-Carbonate  
(C) Sodium Carbonate (D) Sodium Bi-Carbonate (Ans : C)

5. The filament of electric bulb is made of–

- (A) Iron (B) Nichrome  
(C) Tungsten (D) Graphite (Ans : C)

6. Bleaching powder is made from–

- (A) Sulphur dioxide and gypsum (B) Chlorine and Charcoal  
(C) Soda ash and lime (D) Lime and Chlorine (Ans : D)

7. Brass is an alloy of–

- (A) Nickel and Copper (B) Copper and Silver  
(C) Nickel and Zinc (D) Zinc and Copper (Ans : D)

8. The element required for Solar energy conversion–

- (A) Beryllium (B) Silicon  
(C) Tantalum (D) Ultra pure carbon (Ans : B)

9. Monazite is an ore of–

- (A) Sodium (B) Titanium  
(C) Thorium (D) Zirconium (Ans : C)

10. The gas usually causing explosions in coal mines is—  
(A) Hydrogen (B) Carbon monoxide  
(C) Air (D) Methane (**Ans : D**)
11. Cotton fibers are made of—  
(A) cellulose (B) starch  
(C) proteins (D) fats (**Ans : A**)
12. Which of the following ores does not contain iron?  
(A) Haematite (B) Magnetite  
(C) Limonite (D) Cassiterite (**Ans : D**)
13. Which variety of glass is heat resistant ?  
(A) Hard glass (B) Flint glass  
(C) Pyrex glass (D) Bottle glass (**Ans : C**)
14. Which of the following is used for removing air bubbles from glass during its manufacture ?  
(A) Fledspar (B) Arsenic oxide  
(C) Potassium Carbonate (D) Soda Ash (**Ans : B**)
15. What are soaps ?  
(A) Salts of silicates (B) Ester of heavy fatty acids  
(C) Sodium or potassium salts of heavier fatty acids (D) Mixture of glycerol and alcohol  
(**Ans : C**)
16. In which following processes light energy is converted into chemical energy ?  
(A) Respiration (B) Fermentation  
(C) Photosynthesis (D) Photorespiration (**Ans : C**)
17. Cooking oil can be converted into vegetables ghee by the process of—  
(A) Oxidation (B) Hydrogenation  
(C) Distillation (D) Crystallisation (**Ans : B**)
18. Photosynthesis is—  
(A) An exothermic process (B) An endothermic process  
(C) A neutral process (D) A thermostatic process (**Ans : B**)

19. J. B. Sumner isolated first enzyme from Jackbeans as–

- (A) amylase (B) trypsin
- (C) urease (D) renin (Ans : C)

20. Enzymes are absent in–

- (A) fungi (B) bacteria
- (C) viruses (D) algae (Ans : C)

21. The enzymes sucrase acts on–

- (A) sucrose only (B) sucrose and starch
- (C) all disaccharides (D) any organic monomer (Ans : A)

22. C.T. Scanning uses–

- (A) Ultrasound waves (B) Gamma rays
- (C) X-rays (D) None of the above (Ans : A)

23. Chemically 'speropolenin' is a / an–

- (A) co-polymer of carotinoid and fatty acid (B) Carbohydrate
- (C) Propene (D) Lactic acid (Ans : A)

24. A mixture of salt and sand can be separated by–

- (A) Sublimation (B) Dissolving water
- (C) Gravity separation (D) Dry distillation (Ans : B)

25. PVC is obtained by the polymerisation of–

- (A) propane (B) vinyl chloride
- (C) styrene (D) Acetylene (Ans : B)

#### Q BANK 4

1. The most abundant metal in the earth's crust is–

- (A) Zinc (B) Copper
- (C) Aluminium (D) Iron (Ans : C)

2. The gas used to extinguish fire is–

- (A) Neon (B) Nitrogen
- (C) Carbon dioxide (D) Carbon Monoxide (Ans : C)

3. In which of the following activities Silicon Carbide is used ?  
(A) Making cement and glass (B) Disinfecting water and ponds  
(C) Making castes for statues (D) Cutting very hard substances (**Ans : D**)
4. The two elements that are frequently used for making transistors are—  
(A) Boron and Aluminium (B) Silicon and Germanium  
(C) Iridium and Tungsten (D) Niobium and Columbium (**Ans : B**)
5. Which of the following gas is not known as green house gas ?  
(A) Methane (B) Carbon dioxide  
(C) Nitrous oxide (D) CFC (**Ans : C**)
6. Which of the following is not a neutral oxide ?  
(A) Carbon Monoxide (B) Sulphur Dioxide  
(C) Water (D) Nitric Oxide (**Ans : B**)
7. Potassium Permanganate is used for purifying drinking water, because—  
(A) It dissolves the impurities of water (B) It is a sterilizing agent  
(C) It is an oxidising agent (D) It is a reducing agent. (**Ans : C**)
8. The presence of which of the following salts in water causes corrosion in steam boilers ?  
(A) Sodium Chloride (B) Magnesium Chloride  
(C) Calcium bicarbonate (D) Potassium bicarbonate (**Ans : B**)
9. Water is a good solvent of ionic salts because—  
(A) It has no colour (B) It has a boiling point  
(C) It has a high dipole moment (D) It has a high specific heat (**Ans : C**)
10. Nuclear fission is caused by the impact of—  
(A) Proton (B) Electron  
(C) Neutron (D) (A) and (b) (**Ans : C**)
11. Which is a good nuclear fuel ?  
(A) Uranium – 238 (B) Neptunium – 239  
(C) Thorium – 236 (D) Plutonium – 236 (**Ans : C**)

12. Long distance photography is facilitated by–

- (A) Visible light (B) X-rays
- (C) Infra Red rays (D) Ultra violet rays (Ans : C)

13. Which of the following is used in making artificial sweetener saccharine ?

- (A) Benzene (B) Toluene
- (C) Phenol (D) Aniline (Ans : B)

14. Rayon is chemically–

- (A) Glucose (B) Amylase
- (C) Cellulose (D) Peptin (Ans : C)

15. Which of following is used as a filter in rubber tyres?

- (A) Graphite (B) Coal
- (C) Coke (D) Carbon Black (Ans : D)

16. Which of the following substances exhibit the property of sublimation ?

- (A) Ice (B) Wax
- (C) Camphor (D) Ethyl Alcohol (Ans : C)

17. Combustion is the process in which–

- (A) Heat is produced (B) Light is produced
- (C) Heat and Light is produced (D) None of these (Ans : C)

18. The chemical used as a fixer in photography is–

- (A) Borax (B) Sodium thiosulphate
- (C) Sodium Sulphate (D) Ammonium persulphate (Ans : B)

19. Vitamins are–

- (A) inorganic substances which cannot be synthesized by animals
- (B) inorganic by animals
- (C) organic substances that cannot be generally synthesized by animals
- (D) organic substances which can be commonly synthesized by animals (Ans : C)

20. Richest source of vitamin B<sub>1</sub> (thiamine) is–

- (A) cod liver oil (B) curd
- (C) whole bread meal (D) eggs (Ans : C)

21. One of these vitamins is called erythrocyte maturation factor–

- (A) A (B) C  
(C) K (D) B<sub>12</sub> (Ans : D)

22. Saponification involves the hydrolysis of fats and oils by–

- (A) water (B) washing soda  
(C) stearic acid (D) caustic soda (Ans : D)

23. Photo-synthesis is a/ an–

- (A) exothermic process (B) endothermic process  
(C) a neutral process (D) a thermostatic process (Ans : B)

24. Which of the following is a physical change ?

- (A) oxidation (B) reduction  
(C) sublimation (D) decomposition (Ans : C)

25. The process by which an organic compound breaks down into simpler compounds on heating to high temperature is known as–

- (A) Aromatisation (B) Polymerisation  
(C) Pyrolysis (D) Reduction (Ans : C)

#### Q BANK 5

1. The element common to all acids is–

- (A) Oxygen (B) Hydrogen  
(C) Nitrogen (D) Sulphur (Ans : B)

2. Gobar gas contains mainly–

- (A) Methane (B) Carbon dioxide  
(C) Butane (D) Carbon Monoxide (Ans : A)

3. The most malleable metal is–

- (A) Silver (B) Gold  
(C) Aluminium (D) Sodium (Ans : B)

4. Which of the following is used in making smoke bombs ?

- (A) Sulphur (B) Phosphorus

(C) Hydrogen (D) Carbon (**Ans : B**)

5. Caustic Soda is–

(A) NaCl (B)  $\text{Na}_2\text{CO}_3$

(C) NaOH (D)  $\text{NaHCO}_3$  (**Ans : C**)

6. Chemical formula of Water glass is–

(A)  $\text{Na}_2\text{SiO}_3$  (B)  $\text{Al}_2\text{O}_3$

(C)  $\text{NaAlO}_2$  (D)  $\text{CaSiO}_3$  (**Ans : A**)

7. The hardest substance available in earth is–

(A) Platinum (B) Silicon

(C) Diamond (D) Gold (**Ans : C**)

8. Which of the following is the best conductor of electricity ?

(A) Zinc (B) Copper

(C) Gold (D) Silver (**Ans : D**)

9. The ratio of pure gold in 18 carat gold is–

(A) 60% (B) 75%

(C) 80% (D) 100% (**Ans : B**)

10. Which radioactive pollutant has recently drawn the attention of the public due to its occurrence in the building materials ?

(A) Radium (B) Radon

(C) Thorium (D) Plutonium (**Ans : C**)

11. In an atomic explosion enormous energy is released which is due to the–

(A) Conversions of neutrons into protons (B) Conversion of chemical energy into nuclear energy

(C) Conversion of mechanical energy into nuclear energy (D) Conversion of mass into energy (**Ans : D**)

12. Which of the following is used as a coolant in nuclear reactors ?

(A) Heavy water (B) Cadmium

(C) Liquid sodium (D) Graphite (**Ans : C**)

13. In vulcanization, natural rubber is heated with–  
(A) Carbon (B) Sulphur  
(C) Silicon (D) Phosphorus (**Ans : B**)
14. Which type of fire extinguisher is used for petroleum fire ?  
(A) Foam type (B) Soda acid type  
(C) Powder type (D) None of these (**Ans : C**)
15. Which is/ are the important raw materials in cement industry ?  
(A) Limestone (B) Gypsum and Clay  
(C) Clay (D) Limestone and Clay (**Ans : D**)
16. A mixture of iron filings and sand can be separated by–  
(A) Heating (B) Sublimation  
(C) Hand picking (D) Magnetic Separation (**Ans : D**)
17. In which of the following process, Vanadium Pentoxide is used as a catalyst ?  
(A) Contact process (B) Haber process  
(C) Solvay process (D) None of these (**Ans : A**)
18. The rate of chemical reaction does not depend on–  
(A) Concentration (B) Catalyst  
(C) Temperature (D) Pressure (**Ans : D**)
19. The vitamin which can be synthesized in the gut by bacterial action is–  
(A) vitamin B<sub>1</sub> (B) vitamin B<sub>2</sub>  
(C) vitamin B<sub>12</sub> (D) All above (**Ans : D**)
20. Deficiency of vitamin D causes–  
(A) rickets (B) beri-beri  
(C) scurvy (D) night blindness (**Ans : A**)
21. Which one of the following is the best source of vitamin A?  
(A) Apple (B) Carrot  
(C) Amla (D) Raddish (**Ans : B**)

22. Which of the following is not a chemical reaction ?

- (A) Burning of paper (B) Digestion of food  
(C) Conversion of water into steam (D) Burning of coal (Ans : C)

23. Which of the following is a chemical change ?

- (A) Rusting of iron (B) Tempering of iron  
(C) Melting of iron (D) Bending of iron (Ans : A)

24. Photoelectric effect was discovered by–

- (A) Einstein (B) Hertz  
(C) Bohr (D) Plank (Ans : A)

25. The hydrogenation of the vegetables oils takes place in the presence of finely divided–

- (A) aluminium (B) charcoal  
(C) silica (D) nickel (Ans : D)

#### Q BANK 6

1. Tetraethyl lead is used as–

- (A) Mosquito repellent (B) Pain Killer  
(C) Fire extinguisher (D) Petrol additive (Ans : D)

2. Which of the following is used in beauty parlours for hair setting ?

- (A) Phosphorus (B) Sulphur  
(C) Chlorine (D) Silicon (Ans : B)

3. Which of the following is a non-metal that remains liquid in room temperature ?

- (A) Bromine (B) Chlorine  
(C) Helium (D) Phosphorus (Ans : A)

4. Which of the following is not a bleaching agent?

- (A) Sulphur di-oxide (B) Carbon di-oxide  
(C) Sodium hypochlorite (D) Chlorine (Ans : B)

5. The gas usually filled in electric bulb is–

- (A) Hydrogen (B) Oxygen  
(C) Nitrogen (D) Carbon di-oxide (Ans : C)

6. Heavy water is–

- (A) Tritium oxide (B) Deuterium oxide
- (C) Rain water (D) Water at 4°C (**Ans : B**)

7. Cow milk is a rich source of–

- (A) Vitamin A (B) Vitamin B<sub>1</sub>
- (C) Vitamin C (D) Vitamin D (**Ans : B**)

8. The element found in the surface of the Moon is–

- (A) Tin (B) Tungsten
- (C) Tantalum (D) Titanium (**Ans : D**)

9. The average salinity of sea water is–

- (A) 2% (B) 3%
- (C) 2.5% (D) 3.5% (**Ans : D**)

10. The isotope of Uranium capable of sustaining chain reaction is–

- (A) U 235 (B) U 238
- (C) U 239 (D) None of these (**Ans : A**)

11. Radioactive disintegration of Uranium ultimately results in formation of–

- (A) Radium (B) Thorium
- (C) Polonium (D) Lead (**Ans : D**)

12. Atom bomb is made on the basis of–

- (A) Nuclear fusion (B) Nuclear fission
- (C) Both (A) and (B) (D) None of these (**Ans : B**)

13. Which of the following is the petroleum wax ?

- (A) Bees wax (B) Carnauba wax
- (C) Paraffin wax (D) Jojoba wax (**Ans : C**)

14. Which of the following fibres is generally preferred for making gauze and lint ?

- (A) Cotton (B) Rayon
- (C) Nylon (D) Terylene (**Ans : B**)

15. Rubber is coagulated from latex by adding–

(A) Hydrochloric acid (B) Acetic acid

(C) Sulphuric acid (D) Carbonic acid (Ans : B)

16. Which of the following metals can displace hydrogen from dilute acids ?

(A) Zinc (B) Gold

(C) Copper (D) Silver (Ans : A)

17. Reaction of alcohol, with carboxylic acid is known as–

(A) Substitution reaction (B) Addition reaction

(C) Esterification (D) Hydrogenation (Ans : C)

18. Saponification involves the hydrolysis of fats and oils by–

(A) Water (B) Washing soda

(C) Stearic acid (D) Caustic acid (Ans : D)

19. Ascorbic acid is–

(A) Vitamin K (B) Vitamin B

(C) Vitamin A (D) Vitamin C (Ans : D)

20. Sterility in some animals is caused due to deficiency of–

(A) vitamin B (B) vitamin D

(C) vitamin B<sub>12</sub> (D) vitamin E (Ans : D)

21. At the boiling temperature an enzyme becomes–

(A) killed (B) denatured

(C) unaffected (D) inactivated (Ans : B)

22. The penetrating power is maximum in–

(A) a-rays (B) b-rays

(C) g-rays (D) cathode rays (Ans : A)

23. Which of the following rays carry no charge ?

(A) Cathode rays (B) X-rays

(C) a-rays (D) Positive rays (Ans : B)

24. An atom bomb is based on the principle of–

(A) Chemical reaction (B) Chain reaction in the form of fission

(C) Nuclear fusion (D) None (**Ans : B**)

25. In which of the following processes light energy is converted into chemical energy ?

(A) Respiration (B) Fermentation

(C) Photosynthesis (D) Photorespiration (**Ans : C**)

### Q BANK 7

1. From which mineral is radium obtained—

(A) Limestone (B) Haematite

(C) Pitchblende (D) Rutile (**Ans : C**)

2. What is laughing gas ?

(A) Carbon dioxide (B) Sulphur dioxide

(C) Nitrogen Dioxide (D) Nitrous oxide (**Ans : D**)

3. Which of the following is used as a material for making protective windows in space probes ?

(A) Steel (B) Graphite

(C) Tungsten (D) Diamond (**Ans : D**)

4. The gases used in different types of welding would include—

(A) Oxygen and Hydrogen (B) Oxygen, acetylene and argon

(C) Oxygen and acetylene (D) Oxygen, hydrogen and nitrogen (**Ans : C**)

5. Which of the following alloys is used for making magnets ?

(A) Duralumin (B) Stainless Steel

(C) Alnico (D) Magnesium (**Ans : C**)

6. Permanent hardness of water may be removed by the addition of—

(A) Alum (B) Sodium Carbonate

(C) Lime (D) Potassium Permanganate (**Ans : B**)

7. Which of the following is the most stable element?

(A) Uranium (B) Hydrogen

(C) Oxygen (D) Lead (**Ans : D**)

8. Find the odd one ?

- (A) Marble (B) Chalk  
(C) Lime Stone (D) Slaked Lime (Ans : D)

9. Diamond is harder than graphite because of–

- (A) Difference of layers of atoms (B) Tetrahedral structure of diamonds  
(C) Difference of crystalline structures (D) None of these (Ans : C)

10. Which of the following has least penetrating power?

- (A) Alpha particles (B) Beta particles  
(C) Gamma particles (D) All have same power (Ans : A)

11. What is increasing order of the wave lengths of the following colours–

1. Orange 2. Indigo 3. Yellow 4. Violet

- (A) 1, 2, 3, 4 (B) 3, 4, 1, 2  
(C) 4, 3, 2, 1 (D) 4, 2, 3, 1 (Ans : D)

12. Atoms are composed of–

- (A) Electrons only (B) Protons only  
(C) Electrons and Protons (D) Electrons and Nuclei (Ans : D)

13. Paper is manufactured by–

- (A) Wood and resin (B) Wood, Sodium and Bleaching powder  
(C) Wood and bleaching powder (D) Wood, Calcium, hydrogen sulphate and resin (Ans : D)

14. Which synthetic fibre is known as artificial silk ?

- (A) Cotton (B) Rayon  
(C) Terylene (D) Nylon (Ans : B)

15. Deep blue colour is imparted to glass by the presence of–

- (A) Iron oxide (B) Cupric oxide  
(C) Nickel oxide (D) Cobalt oxide (Ans : D)

16. Which of the following gases is obtained by the reaction of water with Calcium Carbide ?

- (A) Acetylene (B) Ethylene  
(C) Methane (D) Water gas (Ans : C)

17. The gas liberated during the reaction of copper with dilute nitric acid is–

- (A)  $\text{NO}_2$  (B)  $\text{N}_2\text{O}_5$   
(C)  $\text{O}_2$  (D)  $\text{NO}$  (Ans : D)

18. Which of following substances undergoes chemical change on heating ?

- (A) Sodium Chloride (B) Silica  
(C) Lead Nitrate (D) Platinum wire (Ans : C)

19. Starch hydrolysing enzyme is–

- (A) sucrose (B) invertase  
(C) amylase (D) cellulase (Ans : C)

20. The enzyme used for the formation of RNA on DNA is–

- (A) DNA polymerase (B) endonuclease  
(C) topoisomerase (D) RNA polymerase (Ans : D)

21. The term 'enzyme' was coined by–

- (A) de Duve (B) Kunhe  
(C) C. Darwin (D) de Candolle (Ans : B)

22. A plant cell differs from an animal cell in the absence of–

- (A) mitochondria (B) centrioles  
(C) ribosomes (D) endoplasmic reticulum (Ans : B)

23. A Vitamin, the absence of which leads to sterility in both males and females is–

- (A) Vitamin K (B) Vitamin C or ascorbic acid  
(C) Vitamin D or calciferol (D) Vitamin E or tocopherol (Ans : D)

24. Anaemia is caused in man due to the deficiency of–

- (A) folic acid (B) vitamin A  
(C) vitamin  $\text{B}_{12}$  (D) none (Ans : A)

25. Rusting of iron involves–

- (A) oxidation (B) reduction  
(C) decomposition (D) displacement (Ans : A)

## Q BANK 8

1. Which form of phosphorus is used in safety metals?  
(A) Red Phosphorus (B) White Phosphorus  
(C) Yellow Phosphorus (D) Black Phosphorous (Ans : A)
2. Stainless steel is an alloy of—  
(A) Iron, Carbon and Nickel (B) Iron and Manganese  
(C) Iron, Chromium and Zinc (D) Iron, Chromium and Nickel (Ans : D)
3. Which of the following is not correctly matched ?  
(A) Galena : Lead Sulphide (B) Green vitriol : Copper sulphate  
(C) Plaster of Paris : Calcium sulphate (D) Calomel : Mercurous Chloride (Ans : B)
4. Potassium nitrate is used in—  
(A) Salt (B) Glass  
(C) Fertiliser (D) Medicine (Ans : B)
5. In which type of rocks are metals like Gold and Copper mostly found ?  
(A) Old igneous (B) Old sedimentary  
(C) Old metamorphic (D) New metamorphic (Ans : A)
6. Which of the following gases is lighter than air ?  
(A) Carbon dioxide (B) Oxygen  
(C) Ammonia (D) Chlorine (Ans : C)
7. A super conductor is characterised by—  
(A) Zero permeability (B) Low permeability  
(C) High permeability (D) Infinite permeability (Ans : A)
8. Of the various forms of carbon, which one is used for absorption purpose ?  
(A) Diamond (B) Graphite  
(C) Coke (D) Wood Charcoal (Ans : D)
9. The main constituents of Pearl are—  
(A) Calcium Carbonate, Magnesium Carbonate (B) Calcium oxide, Ammonium Chloride  
(C) Argonite , Chonchiolin (D) Ammonium Sulphate, Sodium Carbonate (Ans : A)

10. The age of most ancient geological formation is estimated by–  
(A) Potassium–Argon method (B) Ra–Si method  
(C) C14 method (D) Uranium–lead method (**Ans : C**)
11. Which of the following is used as a moderator in nuclear reactor ?  
(A) Ordinary water (B) Radium  
(C) Thorium (D) Graphite (**Ans : D**)
12. Isotopes are separated by–  
(A) Filtration (B) Sublimation  
(C) Distillation (D) Crystalization (**Ans : C**)
13. The combustible material at the tip of a safety match stick is–  
(A) Sulphur (B) Manganese dioxide  
(C) Phosphorus (D) Antimony sulphide (**Ans : D**)
14. Which of the following roofs provide better protection against fire ?  
(A) Cement slab (B) Asbestos sheet  
(C) Reinforced concrete (D) None of these (**Ans : B**)
15. The material used for bleaching paper pulp is–  
(A) Chlorine (B) Caustic soda  
(C) Sodium Hypochlorite (D) Lime (**Ans : C**)
16. Water is neither acidic nor alkaline because–  
(A) it cannot accept or donate protons (B) it boils at high temperature  
(C) it can dissociate into equal number of hydrogen ions (D) it cannot donate or accept electrons (**Ans : C**)
17. PVC is obtained by the polymerisation of–  
(A) Propene (B) Vinyl Chloride  
(C) Styrene (D) Acetylene (**Ans : B**)
18. Which of the following metals can displace zinc from a solution of zinc sulphate ?  
(A) Lead (B) Magnetism  
(C) Iron (D) Mercury (**Ans : B**)

19. Which set of conditions represents easiest way to liquify gas ?  
(A) Low temperature, high pressure (B) High temperature, low pressure  
(C) Low temperature, low pressure (D) High temperature, high pressure (**Ans : A**)
20. Artificial rain is caused by spraying small pellets of which of the following over clouds ?  
(A) Ice (B) Dry Ice  
(C) NaOH (D)  $\text{NH}_4\text{Cl}$  (**Ans : C**)
21. Galvanisation is deposition of—  
(A) Zinc of iron (B) aluminium on Iron  
(C) tin on iron (D) copper on iron (**Ans : A**)
22. Antibiotics are drugs used for the cure of—  
(A) Bacterial diseases (B) Cancer  
(C) Malaria (D) Nervous disorders (**Ans : A**)
23. Blood does not coagulate inside the body due to the presence of—  
(A) haemoglobin (B) heparin  
(C) fibrin (D) plasma (**Ans : B**)
24. Blood pressure is dependent on—  
(A) systolic force (B) cardiac output  
(C) peripheral resistance (D) all of these (**Ans : D**)
25. LPG contains—  
(A) Butane and isobutene (B) Butane and Propane  
(C) Isobutane and Propane (D) Butane, Isobutane and Propane (**Ans : B**)

**Q BANK 9**

1. Which of the following metals forms an amalgam with other metals ?  
(A) Lead (B) Tin  
(C) Zinc (D) Mercury (**Ans : D**)
2. Which of the following is not an ore of Aluminium?  
(A) Felsper (B) Bauxite  
(C) Cryolite (D) Azurite (**Ans : D**)

3. Most soluble in water is–

- (A) Camphor (B) Sugar  
(C) Sulphur (D) Common Salt (**Ans : B**)

4. Which of the following is used as lubricant ?

- (A) Graphite (B) Silica  
(C) Diamond (D) Iron Oxide (**Ans : A**)

5. The purest form of iron is–

- (A) Steel (B) Pig iron  
(C) Cast iron (D) Wrought iron (**Ans : D**)

6. The percentage of carbon is the least in–

- (A) Grey cast iron (B) Wrought iron  
(C) White cast iron (D) Steel (**Ans : D**)

7. An element that does not occur in nature but can be produced artificially is —

- (A) Thorium (B) Radium  
(C) Plutonium (D) Uranium (**Ans : C**)

8. The inert gas which is substituted for nitrogen in the air, used by deep sea divers for breathing is–

- (A) Helium (B) Argon  
(C) Krypton (D) Xenon (**Ans : A**)

9. The group of metals Fe, Co, Ni may be best called as–

- (A) Alkali metals (B) Rare metals  
(C) Main group metals (D) Transition metals (**Ans : D**)

10. Who suggested that the most of the mass of atom is located in nucleus ?

- (A) Bohr (B) Thomson  
(C) Rutherford (D) Avogadro (**Ans : C**)

11. Meson particles are found in–

- (A) R-rays (B) X-rays  
(C) Laser beam (D) Cosmic rays (**Ans : D**)

12. An atom of an element with mass number 23 and atomic number 11 will have—  
(A) 11 neutrons, 12 protons and 11 electrons (B) 11 protons, 12 neutrons and 11 electrons  
(C) 11 protons, 12 electrons and 11 neutrons (D) 23 protons and 11 electrons (**Ans : B**)
13. Which of the following is a protein ?  
(A) Wool (B) Starch  
(C) Natural rubber (D) Cellulose (**Ans : C**)
14. Soap is a mixture of sodium or potassium salts of—  
(A) Monocarboxylic acid (B) Glycerols  
(C) Dicarboxylic acid (D) Tricarboxylic acid (**Ans : A**)
15. Which of the following material is used to prepare blue-black ink ?  
(A) Gallic acid (B) Tannic acid  
(C) Ferrous sulphate (D) All of these (**Ans : D**)
16. Water gas is prepared by passing—  
(A) Steam over white hot coke (B) Air over red hot coke  
(C) Methane over red hot coke (D) Steam over heated sulphur (**Ans : A**)
17. Which of the following metals react with nitrogen to form nitride ?  
(A) Sodium (B) Potassium  
(C) Magnesium (D) None of these (**Ans : C**)
18. One micron is equal to—  
(A) 1/10th of mm (B) 1/100th of mm  
(C) 1/1000th of mm (D) 1/10000th of mm (**Ans : C**)
19. Equal volumes of different gases at any definite temperature and pressure have—  
(A) Equal weights (B) equal masses  
(C) equal density (D) equal no. of molecules (**Ans : D**)
20. Milk is an example of—  
(A) suspension (B) true solution  
(C) emulsion (D) gel (**Ans : C**)

21. Which of the following modes of expressing concentration is independent of temperature–

- (A) Molarity (B) Molality  
(C) Normality (D) Formality (Ans : B)

22. Which of the following substances undergoes chemical change on heating ?

- (A) Sodium chloride (B) Silica  
(C) Lead nitrate (D) Platinum wire (Ans : C)

23. Vulcanisation is a–

- (A) Science of studying volcanoes  
(B) method of degrade polymers  
(C) Process connected with the making of voltaic cells  
(D) Process of hardening of rubber by heating it with sulphur. (Ans : D)

24. Water gas is prepared by passing–

- (A) steam over white-hot coke (B) air over red-hot coke  
(C) methane over red-hot coke (D) steam over heated sulphur (Ans : A)

25. The hormone which stimulates milk production in mammal is known as–

- (A) Glucagon (B) prolactin  
(C) progesterone (D) oestrogen (Ans : B)

#### Q BANK 10

1. Bromine is–

- (A) colourless gas insoluble in water (B) A highly inflammable gas  
(C) A Black solid. (D) A red liquid. (Ans : D)

2. The metal used in storage batteries–

- (A) Iron (B) Copper  
(C) Lead (D) Zinc (Ans : C)

3. Water has maximum density at–

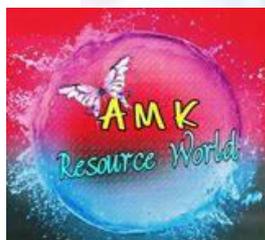
- (A)  $-4^{\circ}\text{C}$  (B)  $0^{\circ}\text{C}$   
(C)  $4^{\circ}\text{C}$  (D)  $100^{\circ}\text{C}$  (Ans : C)

4. The colour of Emerald is–  
(A) Violet (B) Yellow  
(C) Deep Green (D) Prussian Blue (Ans : C)
5. Permanent hardness of water, due to sulphates of the metal, can be destroyed by the use of–  
(A) Nitrates (B) Zeolites  
(C) Sulphonates (D) None of these (Ans : B)
6. Rust is–  
(A) A mixture of  $\text{Fe}_2\text{O}_3$  and  $\text{Fe}(\text{OH})_2$  (B) A mixture of  $\text{FeO}$  and  $\text{Fe}(\text{OH})_2$   
(C)  $\text{FeO}$  only (D) A mixture of  $\text{Fe}_2\text{O}_3$ ,  $3\text{H}_2\text{O}$  and  $\text{FeO}$  (Ans : D)
7. Which of the following characters is not shown by hydrogen–  
(A) It burns in air to form water (B) It supports combustion  
(C) It combines with almost all metals forming hydrides (D) It readily combines with fluorine and chlorine (Ans : B)
8. Which of the following elements is obtained from sea weeds ?  
(A) Argon (B) Sulphur  
(C) Vanadium (D) Iodine (Ans : D)
9. The metallic constituents of hard water are–  
(A) Magnesium, Calcium and tin (B) Iron, tin and calcium  
(C) Calcium, magnesium and iron (D) Magnesium, tin and iron (Ans : C)
10. The location and energy of an electron in an atom can be specified by–  
(A) Atomic mass (B) Atomic number  
(C) Quantum numbers (D) None of these (Ans : C)
11. Old-written material, which cannot be read easily can be read by–  
(A) Cosmic Rays (B) Ultraviolet rays  
(C) Infra Red rays (D) None of these (Ans : C)
12. In an atomic nucleus, neutrons and protons are held together by–  
(A) Gravitational forces (B) Magnetic forces  
(C) Exchange forces (D) Coulombic forces (Ans : C)

13. The type of glass used in making prisms and lenses is–  
(A) Soft glass (B) Pyrex glass  
(C) Jena glass (D) Flint glass (Ans : D)
14. Carbon tetrachloride fire extinguisher should not be used in closed room because it produces poisonous gas called–  
(A) Carbon Monoxide (B) Phosphine  
(C) Phosgene (D) None of these (Ans : D)
15. Which of the following is commonly called a polyamide ?  
(A) Rayon (B) Orion  
(C) Terylene (D) Nylon (Ans : D)
16. Hydrometer is an instrument–  
(A) For measuring sound in water (B) To detect the presence of hydrogen in the atmosphere  
(C) For measuring the specific gravity of liquids (D) To detect the changes in atmospheric humidity (Ans : C)
17. Which thermometer is used to indicate the lowest temperature ?  
(A) Clinical thermometer (B) Gas thermometer  
(C) Alcohol thermometer (D) Resistance thermometer (Ans : C)
18. A chronometer measures–  
(A) Sound waves (B) Time  
(C) Water waves (D) Colour contrast (Ans : B)
19. If temperature is kept constant during the reaction the process is called–  
(A) Adiabatic (B) Isobaric  
(C) Isochoric (D) Isothermal (Ans : D)
20. Cholera is caused by–  
(A) vibrio cholerae (B) salmonella  
(C) bacterioecoccus (D) None of these (Ans : A)
21. Why do colloidal substance do not deposited below ?  
(A) Specific gravity is less (B) It is of very less amount in respect of solvent  
(C) They carry electrical charges (D) They are converted to solvent (Ans : A)

22. Which of the following gases is obtained by the reaction of water with calcium carbide—  
(A) Acetylene (B) Ethylene  
(C) Methane (D) Water gas (**Ans : A**)
23. Cooking oil can be converted into vegetable ghee by the process of—  
(A) oxidation (B) hydrogenation  
(C) distillation (D) crystallisation (**Ans : B**)
24. The contact process is involved in the manufacture of—  
(A) nitric acid (B) Sulphuric acid  
(C) Ammonia (D) Caustic soda (**Ans : B**)
25. Antidiuretic hormone (ADH)—  
(A) inhibits the secretion of growth hormone by the pituitary  
(B) inhibits the rate of heart beat  
(C) causes the muscular walls of the arterioles to contract that simulates the reabsorption of water from the kidney tubules.  
(D) causes an increase in the blood pressure (**Ans : C**)

Visit our Website



[www.amkresourceinfo.com](http://www.amkresourceinfo.com)

-----JOIN US by CLICK here-----



## Important Links in our Website

### A M K – Free E Resources

<http://amkresourceinfo.com/free-e-resources/>

Daily Newspapers : <http://amkresourceinfo.com/daily-newspapers/>

Job Notifications : <http://amkresourceinfo.com/job-notifications/>

E Books : <http://amkresourceinfo.com/e-books-2/>

E Magazines : <http://amkresourceinfo.com/e-magazines-2/>

Online Buy Books : <http://amkresourceinfo.com/online-buy-books/>

Free Exam Study Materials

RRB – Group D : <http://amkresourceinfo.com/rrb-group-d/>

And many more.....

Keep visiting for more updates

**"Your Success, Our Motto"**