

DAILY G.K SET- 14

1. Potassium is a chemical element with the symbol:

- A. Na B. K C. S D. Ca

2. Which one of the following is NOT a compound?

- A. Sodium Chloride B. Carbon Monoxide
C. Iron D. Water

3. There are some plastics that when moulded once cannot be softened by heating. These are called _____.

- A. thermoplastic polyurethanes (TPU)
B. high-density polyethylene (HDPE)
C. polyvinyl chloride
D. thermosetting polymers

4. Which among the following gases is also known as 'Laughing Gas'?

- A. Sulphur dioxide B. Nitrogen oxide
C. Carbon dioxide D. Carbon monoxide

5. Which of the following is NOT a noble gas?

- A. Helium B. Hydrogen
C. Neon D. Argon

6. Which of the following substances is used as a substitute for chlorine in bleaching?

- A. Ethanal B. Liquid carbon dioxide
C. Hydrogen peroxide D. Tetrachloroethene

7. Which of the following metals in pure form has the highest melting point?

- A. Gold B. Tungsten
C. Copper D. Platinum

8. Which chemical law proposes that 'soft drinks and soda bottles are sealed under high pressure to increase the solubility of CO₂'?

- A. Dalton's law B. Henry's law
C. Ohm's law D. Raoult's law

9. Which of the following solvent is known as Universal Solvent?

- A. Kerosene B. Alcohol
C. Acetone D. Water

10. ZnSO₄ . 7H₂O is the chemical formula of which substance?

- A. Green Vitriol B. White Vitriol

- C. Bleaching powder D. Blue Vitriol

11. Lichens are constituted by_____.

- A. Fern & Fungi B. Algae & Bryophyta
C. Bacteria & Virus D. Fungi & Algae

12. Which one of the following hormone is called "Emergency Hormone"?

- A. Adrenaline B. Thyroxine
C. Vasopressin D. Insulin

13. Malaria is transmitted from one person to another by:

- A. Aedes Mosquito B. Culex Mosquito
C. Anopheles Mosquito D. All of the above

14. Conglobated gland is a leaf like structure found in

- A. Female Cockroach B. Male Cockroach
C. Male Asearis D. Female Ascaris

15. A vitamin requires cobalt for its activity. The vitamin is

- A. Vitamin B₁₂ B. Vitamin D
C. Vitamin B₂ D. Vitamin A

16. Black death is

- A. Cancer B. Plague
C. AIDS D. Gonorrhoea

17. Which of the following weeds has been found useful to check water pollution caused by industrial effluents?

- A. Parthenium B. Elephant grass
C. Water hyacinth D. Both (1) and (2) above

18. The pigment that protects plants from the harmful effect of ultraviolet rays is _____.

- A. Chlorophyll B. Carotenoid
C. Phycocyanin D. Plastid

19. Glycogen, starch and cellulose are polymers of which of following?

- A. Fructose B. Glucose
C. Lactose D. Maltose

20. The biological decomposition of organic substances in wastes under controlled conditions known as

- A. Composting B. Incineration
C. sanitary landfill D. Pyrolysis

ANSWER

1. Answer :Option B

- The symbol of **Potassium** is **K**.
- The symbol of **Sodium** is **Na**.
- The symbol of **Sulphur** is **S**.
- The symbol of **calcium** is **Ca**.
- Some other unique symbols are-
Gold-Au
Silver-Ag
Tin-Sn

Lead-Pb

Antimony-Sb

Iron-Fe

Mercury-Hg

Tungsten-W

2. Answer :Option C

• **Iron is not a compound.** It is an element with symbol Fe and atomic number 26.

• **Sodium Chloride** is common salt with chemical formula NaCl. It is an ionic compound with 1:1 ratio of Sodium and Chloride ions.

• **Carbon Monoxide** is a chemical compound consists of one carbon and one oxygen atom connected by covalent bond. It is also known as Silent Killer. It's chemical formula is CO.

• **Water** is a chemical compound represented as H₂O. Here also hydrogen and oxygen atoms are connected by covalent bonds.

3. Answer :Option D

• The **thermosetting polymers** is a permanent setting polymer that gets hardened and sets during moulding process and cannot be softened again.

• They are usually soft solid or liquid. Heat provides energy for chemical reactions that increases the cross-linking between polymer chains.

4. Answer :Option B

• **Nitrogen Oxide/Nitrous oxide is known as "Laughing Gas".**

• It is a chemical compound, an oxide of Nitrogen with the formula- N₂O.

• It is a colourless non-flammable gas, when inhaled, the gas slows down the body's reaction time.

5. Answer :Option B

• **Hydrogen** is not a noble gas.

• The six noble gases are helium (He), neon (Ne), argon (Ar), krypton (Kr), xenon (Xe), and radon (Rn).

• Their atomic numbers are, respectively, 2, 10, 18, 36, 54, and 86.

6. Answer :Option C

• Hydrogen peroxide is used as a substitute for chlorine in bleaching.

• Chlorine, sodium hypochlorite, calcium hypochlorite, and hydrogen peroxide are commonly used as bleaches.

7. Answer :Option B

• **Tungsten is the metal in pure form** that has the highest melting point and lowest vapour pressure.

• It is a chemical element with the symbol W and atomic number 74.

• It is also a rare metal found naturally on Earth but combined with other elements in chemical compounds rather than alone.

8. Answer :Option B

• **Henry's law** proposes that 'soft drinks and soda bottles are sealed under high pressure to increase the solubility of CO₂'.

• The mass of a gas dissolved in a unit volume of the liquid at constant temperature is directly proportional to the pressure of the gas present in equilibrium with the liquid.

9. Answer :Option D

* **Water** is called the "**universal solvent**" because it dissolves more substances than any other liquid.

* This is important to every living thing on earth.

* Water is capable of dissolving a variety of different substances, which is why it is such a good solvent.

10. Answer :Option B

• **Zink Sulphate** has the formula **ZnSO₄.7H₂O**.

• It was historically known as "**white vitriol**".

• Vitriol is an archaic name for a sulfate.

• In medicine it is used together with oral rehydration therapy (ORT) and an astringent.

11. Answer :Option D

- A lichen is not a single organism. Rather, it is a symbiosis between different organisms - a fungus and an alga or cyanobacterium.

- Cyanobacteria are sometimes still referred to as 'blue-green algae', though they are quite distinct from the algae. The non-fungal partner contains chlorophyll and is called the photobiont. The fungal partner may be referred to as the mycobiont.

12. Answer :Option A

Adrenaline: A stress hormone produced within the adrenal gland that quickens the heart beat, strengthens the force of the heart's contraction, and opens up the bronchioles in the lungs, among other effects. The secretion of adrenaline is part of the human 'fight or flight' response to fear, panic, or perceived threat. Also known as epinephrine.

13. Answer :Option C

- Anopheles is a genus of mosquito can transmit human malaria.
- **Malaria** is an infectious disease caused by parasites that invade red blood cells. The protozoan parasites are among several species of the genus Plasmodium.

14. Answer :Option B

- The conglobate gland of **male cockroaches** is a reproductive organ anatomically close to the accessory glands.
- It is involved in the formation of the spermatophore.

15. Answer :Option A

Vitamin B12 also called **cobalamin**, is a water-soluble vitamin with a key role in the normal functioning of the brain and nervous system, and for the formation of blood. It is one of the eight B vitamins. It is normally involved in the metabolism of every cell of the human body, especially affecting DNA synthesis and regulation, but also fatty acid metabolism and amino acid metabolism. Neither fungi, plants, nor animals (including humans) are capable of producing vitamin B₁₂. Only bacteria and archaea have the enzymes required for its synthesis, although many foods are a natural source of B₁₂ because of bacterial symbiosis. The vitamin is the largest and most structurally complicated vitamin and can be produced industrially only through bacterial fermentation-synthesis.

16. Answer :Option B

The Black Death in an epidemic of bubonic plague, a disease caused by the bacterium *Yersinia pestis* that circulates among wild rodents where they live in great numbers and density. Such an area is called a 'plague focus' or a 'plague reservoir'.

Hence, option B is correct.

17. Answer :Option C

Water hyacinth weeds have been found useful to check heavy metal pollution of water bodies that are caused by industrial effluents. The water hyacinth (*Eichhornia crassipes*) is a common aquatic plant in many tropical countries. Its ability is to absorb nutrients and other elements from the water bodies. This plant absorbs industrial effluents and other heavy material from the polluted water and it also makes the water useful for purification purposes.

Hence, option C is correct.

18. Answer :Option B

- The pigments that protect plants from the harmful effect of ultraviolet rays is **Carotenoid**.
- Carotenoids are organic pigments that are found in the chloroplasts and chromoplast of plants and some other photosynthetic organisms, including some bacteria and some fungi.
- Hence, option B is correct.

19. Answer :Option B

- Glycogen, starch and cellulose are **polymers of Glucose**.
- The main structural difference comes from the difference in the sequence of bonds in glycogen and cellulose and starch where the three of them composed mainly of glucose.
- They differ in the type of glucose present and the bonds which link the glucose monomers together.

20. Answer :Option A

Composting is nature's process of recycling decomposed organic materials into a rich soil known as compost. Anything that was once living will decompose. Basically, backyard composting is an acceleration of the same process nature uses.