

Chemistry Q&A – 27th July 2017:

Q1. Why H₂O is liquid and H₂S is a gas?

- (a) oxygen forms stronger hydrogen bond than sulphur.
- (b) oxygen is less electronegative than sulphur.
- (c) atomic radius of oxygen is less than that of sulphur.
- (d) atomic radius of oxygen is greater than that of sulphur.

Ans.(a)

Q2. Which of the following is the nuclear fuel in the sun?

- (a) uranium
- (b) hydrogen
- (c) helium
- (d) alpha particles

Ans.(b)

Q3. 'Acid rain' is caused due to air-pollution by-

- (a) carbon dioxide
- (b) carbon monoxide
- (c) methane
- (d) nitrous oxide and sulphur dioxide

Ans.(d)

Q4. Which device is used for the measurement of radioactivity?

- (a) Mass spectrometer
- (b) Cyclotron
- (c) Nuclear reactor
- (d) G.M. counter

Ans.(d)

Q5. To protect tooth decay we are advised to brush our teeth regularly. The nature of the tooth paste commonly used is—

- (a) acidic
- (b) neutral
- (c) basic
- (d) corrosive

Ans.(c)

Q6. The metal constituent of chlorophyll is—

- (a) Iron
- (b) Potassium
- (c) Manganese
- (d) Magnesium

Ans.(d)

Q7. When soggy biscuits are kept inside the fridge for some time they become crisp because—

- (a) cooling releases extra moisture
- (b) humidity inside the fridge is low and extra moisture is absorbed
- (c) humidity inside the fridge is high and extra moisture is absorbed
- (d) pressure inside the fridge is high and helps in releasing extra moisture

Ans.(b)

Q8. Which one of the following mixtures is homogeneous?

- (a) Starch and sugar
- (b) Methanol and water
- (c) Graphite and charcoal
- (d) Calcium carbonate and calcium bicarbonate

Ans.(b)

Q9. Which of the following statements is correct for solid state?

- (1) The constituent particles are closely packed
 - (2) The attracting forces are very strong
 - (3) The movement of constituent particle is restricted
 - (4) They do have fixed shape
 - (a) (1), (2) and (3) are correct
 - (b) (2) and (3) are correct
 - (c) (1) and (2) are correct
 - (d) All of these
- Ans.(d)

Q10. Rate of reaction of organic compounds is slow due to-

- (a) ionic bonding in them
 - (b) amphoteric nature
 - (c) coordinate covalent bonding
 - (d) covalent bonding
- Ans.(d)

Q11. Match the following with correct response.

- (1) Dry ice
 - (2) Humidity
 - (3) Temperature
 - (4) Liquefied gas
 - (A) Reduce evaporation
 - (B) Increasing pressure reducing temperature
 - (C) Increases evaporation
 - (D) Solid carbon-dioxide
 - (a) 1-C, 2-B, 3-D, 4-A
 - (b) 1-D, 2-A, 3-C, 4-B
 - (c) 1-A, 2-C, 3-B, 4-D
 - (d) 1-B, 2-D, 3-A, 4-C
- Ans.(b)

Q12. Silicon is used in which of the following?

- (a) semiconductors
 - (b) solar energy devices
 - (c) transistors
 - (d) All of these
- Ans.(d)

Q13. Uric acid is present in which of the following?

- (a) Soda water
 - (b) Rancid butter
 - (c) Sour milk
 - (d) Urine of mammals
- Ans.(d)

Q14. Consider the following statements:

- 1. Diamond is hard and graphite is soft.
 - 2. Diamond is soft and graphite is hard.
 - 3. Diamond is a bad conductor but graphite is a good conductor.
 - 4. Diamond is a good conductor but graphite is a bad conductor.
- Which of the statements given above is/are correct ?

- (a) 1 and 3
 - (b) 1 only
 - (c) 2 and 3
 - (d) 1 and 4
- Ans.(a)

Q15. It is more comfortable to wear white clothes in summer because

- (a) they reflect heat falling on them.
 - (b) they radiate heat transferred from the body.
 - (c) they absorb perspiration.
 - (d) they are soothing to the eye.
- Ans.(a)

