SSC CGL 2023 All Chemistry Question Part-2

Q. 1	**When did Linus Carl Pauling receive the Nobel Prize in Chemistry for 'his research into the nature of the chemical bond and its applications to the elucidation of the structure of complex substances'?** **a) 1956** ✗ **b) 1954** ✓ **c) 1958** ✗ **d) 1950** ✗
Explanation:	

Q. 2	**_____ is the process of complete or incomplete oxidation or hydrolysis of fats and oils when exposed to air, light, moisture, or bacterial action that spoils food.** **a) Rancidification** ✓ **b) Auto-oxidation** ✗ **c) Hydrogenation** ✗ **d) Auto reduction** ✗
Explanation:	

Q. 3	**What will be the atomic number of an element X which is placed in period 2 and group 17?** **a) 9** ✓ **b) 8** ✗ **c) 7** ✗ **d) 10** ✗
Explanation:	

Q. 4	**From which Latin word is the s block element calcium derived?** **a) Calcio** ✗ **b) Coleus** ✗ **c) Calum** ✗ **d) Calx** ✓
Explanation:	

Q. 5	**Which German chemist and physicist proposed that an aromatic compound must have an odd number of pairs of electrons,Which can mathematically be written as 4n+2 (n = 0,1,2,3, etc.) in 1931?** **a) Friedrich Kekule** ✗ **b) Rosalind Franklin** ✗ **c) Antoine Lavoisier** ✗ **d) Erich Huckel** ✓
Explanation:	

Q. 6	**Trichloromethane is better known as:** **a) butanes** ✗ **b) chloroform** ✓ **c) LPG** ✗ **d) laughing gas** ✗
Explanation:	

Q. 7	**Which element of Group 17 has two isotopes of masses 35 and 37 amu with average abundance of 75.77% and 24.23%, respectively?** **a) Chlorine** ✓ **b) Fluorine** ✗ **c) Astatine** ✗ **d) Iodine** ✗
Explanation:	

Q. 8	**What is the product formed when CH_3CH_2OH reacts with O_2?** **a) $CO_2 + H_2O$ + light** ✗ **b) H_2O + heat** ✗ **c) $CO_2 + H_2O$ + heat and light** ✓ **d) CO_2 + heat and light** ✗
Explanation:	

Q. 9	**Which of the following chemicals is used as a preservative to slow browning and discolouration in foods and beverages during preparation, storage and distribution?** **a) Sulphites** ✓ **b) Chlorine** ✗ **c) Nitrous oxide** ✗ **d) Phosgene** ✗
Explanation:	

Q. 10	**The chemical formula of propene is:** **a) C3H6** ✓ **b) C2H2** ✗ **c) C3H4** ✗ **d) C2H4** ✗
Explanation:	

Q. 11	**Which sodium compound is the most popular additive to various items such as sauces, salad dressings and beverages for its preservative action?** **a) Sodium fluoride** ✗ **b) Sodium hypochlorite** ✗ **c) Sodium bicarbonate** ✗ **d) Sodium benzoate** ✓
Explanation:	

Q. 12	**Identify the element one that does NOT belong to Group 1 of the Modern Periodic Table.** **a) Sodium** ✗ **b) Hydrogen** ✓ **c) Rubidium** ✗ **d) Lithium** ✗
Explanation:	

Q. 13	**_____ is a naturally occurring organic compound with the formula (C6H5)2CO.** **a) Methcathinone** ✗ **b) Benzophenone** ✓ **c) Acetophenone** ✗ **d) Propiophenone** ✗
Explanation:	

Q. 14	**What happens to the atomic size as you go down the group?** **a) Decreases** ✗ **b) Triples** ✗ **c) No change** ✗ **d) Increases** ✓
Explanation:	

Q. 15	**Which of the following is the correct Lewis structure of O3?** **a) a** ✗ **b) c** ✗ **c) b** ✗ **d) d** ✓
Explanation:	

Q. 16	**The approximate amount of silica present in cement is:** **a) between 37% and 45%** ✗ **b) between 27% and 35%** ✗ **c) between 47% and 55%** ✗ **d) between 17% and 25%** ✓
Explanation:	

Q. 17	**Which of the following is a highly electropositive element that readily gives up an electron in order to obtain a stable electronic configuration?** **a) N** ✗ **b) O** ✗ **c) Cl** ✗ **d) Na** ✓
Explanation:	

Q. 18	**Who discovered that diborane reacts with aldehydes and ketones to produce dialkoxyboranes,Which are hydrolysed by water to produce alcohols?** **a) Arne Tiselius** ✗ **b) Arthur Stoll** ✗ **c) Hugo Rudolph Kruyt** ✗ **d) HC Brown** ✓
Explanation:	

Q. 19	**What is the percentage composition of the element of H2SO3?** **a) 2.5% H, 39% S, 58.5% O** ✓ **b) 33% H, 16% S, 51% O** ✗ **c) 2.5% H, 58.5% S, 39% O** ✗ **d) 58.5% H, 39% S, 2.5% O** ✗
Explanation:	

Q. 20	**Pepperonil, ethyl acetate, butyraldehyde and nitrate are some common adulterants used in:** **a) oils** ✗ **b) spices** ✗ **c) ice cream** ✓ **d) honey** ✗
Explanation:	

Q. 21	**Which of the following pair of compound – boiling point is correct?** **I. Chloroform – 334K** **II. Methane – 111K** **a) Both I and II** ✓ **b) Only II** ✗ **c) Neither I nor II** ✗ **d) Only I** ✗
Explanation:	

Q. 22	**Which of the following has the highest boiling point?** **a) Alkanes** ✗ **b) Alkenes** ✗ **c) Free carbon dioxide** ✗ **d) Alkynes** ✓
Explanation:	

Q. 23	**Creaming fat and sugar, whipping egg whites, or whipping heavy cream are examples of what type of leavening?** **a) Mechanical leavening** ✓ **b) Organic leavening** ✗ **c) Chemical leavening** ✗ **d) Physical leavening** ✗
Explanation:	

Q. 24	**Which element's atomic number in the periodic table is named seaborgium, according to the notation of IUPAC nomenclature?** **a) 113** ✗ **b) 102** ✗ **c) 110** ✗ **d) 106** ✓
Explanation:	

Q. 25	**A class of organic compounds that contain an oxygen between two alkyl groups is called:** **a) aldehyde** ✗ **b) ether** ✓ **c) alcohol** ✗ **d) ketone** ✗
Explanation:	

Q. 26	**Which of the following is a synthetic fluorinated compound with an extremely stable molecular structure known to be the most potent greenhouse gas ever found?** **a) Sulphur hexafluoride** ✓ **b) Sodium monofluorophosphate** ✗ **c) Calcium fluoride** ✗ **d) Hydrogen fluoride** ✗
Explanation:	

Q. 27	**The valency of argentic is:** **a) −1** ✗ **b) −2** ✗ **c) +2** ✓ **d) +3** ✗
Explanation:	

Q. 28	**Which of the following organic compounds is synonymous with olefiant gas which is used to make anaesthetics, refrigerants and other chemicals?** **a) Ethylene** ✓ **b) 1-Pentene** ✗ **c) Butane** ✗ **d) Methane** ✗
Explanation:	

Q. 29	**In Which year did John Newlands propound the 'Law of Octaves' an innovative concept proposing the periodicity of chemical elements arranged in the order of atomic weight?** **a) 1863** ✗ **b) 1867** ✗ **c) 1861** ✗ **d) 1865** ✓
Explanation:	

Q. 30	**Which organic compound has a pleasant almond aroma that is commonly used to impart almond flavour to chocolate and baked goods?** **a) Benzaldehyde** ✓ **b) Manzanate** ✗ **c) Ethyl maltol** ✗ **d) Isoamyl acetate** ✗
Explanation:	

Q. 31	**Dry ice, ammonium chloride, naphthalene balls and camphor, all these compounds are an example of:** **a) Cooling agents** ✗ **b) Inflammable substances** ✗ **c) Sublimable substances** ✓ **d) Solidifying agents** ✗
Explanation:	

Q. 32	**In 1808, whose work provided a physical picture of how compounds are formed by the combination of two or more different types of atoms?** **a) John Dalton** ✓ **b) Joseph J Thomson** ✗ **c) George Zweig** ✗ **d) Niels Bohr** ✗
Explanation:	

Q. 33	**In which year did Antoine Lavoisier publish 'Methods of Chemical Nomenclature', which included the rules for naming chemical compounds that are still in use today?** **a) 1780** ✗ **b) 1790** ✗ **c) 1787** ✓ **d) 1783** ✗
Explanation:	

Q. 34	**Choose the correct set of the names for the organic compounds in the given figure.** **a) a: Furan, b: Thiophene, c: Aniline** ✗ **b) a: Furan, b: Pyridine, c: Thiophene** ✓ **c) a: Furan, b: Toluene, c: Pyridine** ✗ **d) a: Anisole, b: Thiophene, c: Pyridine** ✗
Explanation:	

Q. 35	**The compound in which a hydroxy group, -OH, is attached to a saturated carbon atom which has two other carbon atoms attached to it is called:** **a) tertiary alcohol** ✗ **b) aldehyde** ✗ **c) secondary alcohol** ✓ **d) primary alcohol** ✗
Explanation:	

Q. 36	**Which of the following pair of compound – melting point is correct?** **I. Acetic acid – 290K** **II. Ethanol – 156K** **a) Only I** ✗ **b) Both I and II** ✓ **c) Neither I nor II** ✗ **d) Only II** ✗
Explanation:	

Q. 37	**In the early 1800s, who discovered that each chemical element is made up of a unique type of atom and that atoms differ by their mass?** **a) Antoine Lavoisier** ✗ **b) Robert Boyle** ✗ **c) John Dalton** ✓ **d) Amedeo Avogadro** ✗
Explanation:	

Q. 38	**When did Dmitri Mendeleev invent the periodic table, ordering the symbols of the chemical elements according to their atomic weights?** **a) 1779** ✗ **b) 1890** ✗ **c) 1869** ✓ **d) 1794** ✗
Explanation:	

Q. 39	**Which of the following statements is FALSE?** **a) Histidine is an essential alpha amino acid and works towards growth and tissue repair.** ✗ **b) Histidine plays an important role in growth, repair of damaged tissues and making of blood cells.** ✗ **c) Lysine plays an important role in normal growth and muscle turnover.** ✗ **d) Valine is a non-essential amino acid, and it is synthesised in the human body.** ✓
Explanation:	

Q. 40	**Which of the soluble fibres found in fruits is used as a thickener in cooking and baking?** **a) Cellulose** ✗ **b) Lignin** ✗ **c) Pectin** ✓ **d) Inulin** ✗
Explanation:	

Q. 41	**Identify the correct statement about Newlands' law of octaves.** **a) He started with the element having the highest atomic mass (hydrogen) and ended at thorium which was the 56th element.** ✗ **b) He started with the element having the lowest atomic mass (hydrogen) and ended at aluminium.** ✗ **c) He started with the element having the lowest atomic mass (hydrogen) and ended at thorium which was the 56th element.** ✓ **d) He started with the element having the lowest atomic mass (hydrogen) and ended at sodium.** ✗
Explanation:	

Q. 42	**Identify the last element from the fifth period.** **a) Rubidium** ✗ **b) Xenon** ✓ **c) Helium** ✗ **d) Yttrium** ✗
Explanation:	

Q. 43	**Which of the following group elements are called chalcogens?** **a) Group-17** ✗ **b) Group-18** ✗ **c) Group-2** ✗ **d) Group-16** ✓
Explanation:	

Q. 44	**What is the name of a metallic radioactive transuranic element with atomic number 101 in the actinide series, discovered in 1955?** **a) Nobelium** ✗ **b) Seaborgium** ✗ **c) Mendelevium** ✓ **d) Rutherfordium** ✗
Explanation:	

Q. 45	**Identify the element that does NOT belong to Period 6 of Modern Periodic Table.** **a) Platinum** ✗ **b) Tungsten** ✗ **c) Silicon** ✓ **d) Rhenium** ✗
Explanation:	

Q. 46	**Lanthenides are often called:** **a) inert gases** ✗ **b) rare earth elements** ✓ **c) d-block elements** ✗ **d) alkali metals** ✗
Explanation:	

Q. 47	**Which of the following elements has variable valency?** **a) Sulphur** ✗ **b) Sodium** ✗ **c) Iron** ✓ **d) Magnesium** ✗
Explanation:	

Q. 48	**In Which year did an English scientist named Michael Faraday discover benzene in the illuminating gas?** **a) 1827** **b) 1820** **c) 1822** **d) 1825**
Explanation:	

Q. 49	**Which of the following statements is INCORRECT about granite?** **a) Granite is composed mainly of quartz and feldspar with minor amounts of mica.** **b) Granite is the most abundant rock in the continental crust.** **c) These are igneous rocks that form when hot, molten rock crystallises and solidifies.** **d) It is the most common sedimentary rock.**
Explanation:	

Q. 50	**A natural process of mechanical disintegration and or chemical decomposition of the rocks of the crust of the Earth by certain physical and chemical agencies of the atmosphere is known as:** **a) mew rock formation** **b) weathering** **c) solidification of rocks** **d) watering of rocks**
Explanation:	

Q. 51	**a) i-a, ii-b, iii-c, iv-d** ✗ **b) i-b, ii-a, iii-d, iv-c** ✗ **c) i-d, ii-c, iii-b, iv-a** ✓ **d) i-b, ii-c, iii-a, iv-d** ✗
Explanation:	

Q. 52	**Which of the following acids makes up 55–80% of olive oil, making it a good choice for most cooking methods?** **a) Oleic acid** ✓ **b) Lauric acid** ✗ **c) Stearic acid** ✗ **d) Arachidic acid** ✗
Explanation:	

Q. 53	**Pectin, which is responsible for the firmness and softness of fruits, is mainly composed of which acid unit?** **a) Glutamic acid** ✗ **b) Lactic acid** ✗ **c) Aspartic acid** ✗ **d) Galacturonic acid** ✓
Explanation:	

Q. 54	**Ethanoic acid is a synonym for which acidic liquid is used in kitchens around the world as a basic seasoning in the preparation and cooking of certain foods?** **a) Vanillin** ✗ **b) Vinegar** ✓ **c) Caustic Soda** ✗ **d) Apple Juice** ✗
Explanation:	

Q. 55	**Who received the Nobel Prize 'for his research in the stereochemistry of organic molecules and reactions' in 1975?** **a) Geoffrey Wilkinson** ✗ **b) Vladimir Prelog** ✓ **c) Paul J Flory** ✗ **d) William N Lipscomb** ✗
Explanation:	

Q. 56	**Who along with Arthur Compton received the Nobel Prize in 1927 for the development of the cloud chamber for the detection of charged particles?** **a) Charles Wilson** ✓ **b) Ernest Lawrence** ✗ **c) Harold Urey** ✗ **d) Frederick Soddy** ✗
Explanation:	

Q. 57	**Which of the following pairs is INCORRECTLY matched?** **a) Acromegaly – Adrenaline** ✓ **b) Diabetes – Insulin** ✗ **c) Cushing's syndrome – Cortisol** ✗ **d) Goitre – Thyroxin** ✗
Explanation:	

Q. 58	**Who found an empirical relationship between the half-life of alpha decay and the energy of the emitted alpha particles in 1911?** **a) Geiger and Nuttall** ✓ **b) Soddy and Aston** ✗ **c) Fermi and Meitner** ✗ **d) Chadwick and Lawrence** ✗
Explanation:	

Q. 59	**Which suffix is used when the −CHO group is attached to a carbon atom of a ring or ring system, or to a heteroatom?** **a) Nitrile** ✗ **b) Halide** ✗ **c) Amide** ✗ **d) Carbaldehyde** ✓
Explanation:	

Q. 60	**What is the colour of the flame when unsaturated hydrocarbons burn?** **a) Blue** ✗ **b) Red** ✗ **c) Yellow** ✓ **d) Green** ✗
Explanation:	

Q. 61	**a) i-a, ii-c, iii-b, iv-d** ✗ **b) i-b, ii-a, iii-c, iv-d** ✗ **c) i-d, ii-c, iii-b, iv-a** ✓ **d) i-a, ii-b, iii-c, iv-d** ✗
Explanation:	

Q. 62	**What is the atomicity of Chlorine?** **a) Tetra-atomic** ✗ **b) Monoatomic** ✗ **c) Diatomic** ✓ **d) Poly-atomic** ✗
Explanation:	

Q. 63	**In the early nineteenth century, who demonstrated that there are fourteen space lattices, or regularly repeating arrangements of points in space, that differ in symmetry and geometry?** **a) Auguste Bravais** ✓ **b) Jerome Karle** ✗ **c) William Bragg** ✗ **d) Charles Frank** ✗
Explanation:	

Q. 64	**In which method of cooking is food heated slowly over a source of heat and cooked by high heat and air convection depending on the position of the food in relation to the fire?** **a) Stewing** ✗ **b) Braising** ✗ **c) Spit-roasting** ✓ **d) Poaching** ✗
Explanation:	

Q. 65	**Butan-2-ol is a:** **a) secondary alcohol** ✓ **b) ketone** ✗ **c) tertiary alcohol** ✗ **d) primary alcohol** ✗
Explanation:	

Q. 66	**a) i-d, ii-c, iii-b, iv-a** ✓ **b) i-a, ii-b, iii-c, iv-d** ✗ **c) i-b, ii-a, iii-d, iv-c** ✗ **d) i-b, ii-c, iii-a, iv-d** ✗
Explanation:	

Q. 67	**The characteristic garlicky odour of garlic is due to _____.** **a) copper** ✗ **b) iodine** ✗ **c) chlorine** ✗ **d) sulphur** ✓
Explanation:	

Q. 68	**Which actinide, discovered by Glenn T Seaborg in 1940, is used as a heat source for sensitive electrical components in satellites as well as a power source for satellites?** **a) Americium** ✗ **b) Nobelium** ✗ **c) Curium** ✗ **d) Plutonium** ✓
Explanation:	

Q. 69	**Which of the following is used to chemically test starch?** **a) Sulphur solution** ✗ **b) Bromine solution** ✗ **c) Chlorine solution** ✗ **d) Iodine solution** ✓
Explanation:	