SSC CPO 2023 All Chemistry Question

Q. 1	**In alchemy, aqua fortis is the classical name of which chemical compound that is used chiefly in the manufacture of explosives and fertilisers, and in organic synthesis?** **a) Nitric acid** ✓ **b) Chloric acid** ✗ **c) Hydrobromic acid** ✗ **d) Formic acid** ✗
Explanation:	

Q. 2	**In Which year did the Ministry of Health and Family Welfare of India launch the Weekly Iron and Folic Acid Supplementation (WIFS) program to meet the challenge of high prevalence and incidence of anaemia among adolescent girls and boys (56% girls and 30% boys)?** **a) 2013** ✗ **b) 2011** ✗ **c) 2014** ✗ **d) 2012** ✓
Explanation:	

Q. 3	**Which compound structure includes a saturated short-chain fatty acid with 4-carbon molecules, commonly found in esterified form in animal fats and plant oils?** **a) Butyric acid** ✓ **b) Propionic acid** ✗ **c) Succinic acid** ✗ **d) Lactic acid** ✗
Explanation:	

Q. 4	**The synthesis of which chemical is inhibited due to aspirin?** **a) Pyrites** ✗ **b) Histamines** ✗ **c) Prostaglandins** ✓ **d) Analgesics** ✗
Explanation:	

Q. 5	**In July 2018, an experiment aboard the International Space Station cooled a cloud of atoms of which chemical element to one ten-millionth of one Kelvin above absolute zero, forming a Bose-Einstein Condensate in space?** **a) Plutonium** ✗ **b) Thorium** ✗ **c) Rubidium** ✓ **d) Radium** ✗
Explanation:	

Q. 6	**Which odourless, colourless, tasteless and chemically unreactive gas was invented by Daniel Rutherford in 1772 and was independently isolated at the same time by CW Scheele and H Cavendish?** **a) Nitrogen** ✓ **b) Argon** ✗ **c) Fluorine** ✗ **d) Oxygen** ✗
Explanation:	

Q. 7	**What is the chemical formula for the aldehyde group?** **a) –COOH** **b) –OH** **c) –CH2O** **d) –CHO**
Explanation:	

Q. 8	**Which chemical element of Group 18 of the periodic table is produced by the natural radioactive decay of uranium in soils and rocks?** **a) Radon** **b) Krypton** **c) Oganesson** **d) Neon**
Explanation:	

Q. 9	**Which of the following statements is correct?** **a) Zinc oxide is a form of rust.** **b) Chemically rust is non-hydrated ferric oxide.** **c) Copper can also turn into rust upon hydration.** **d) Chemically rust is hydrated ferric oxide.**
Explanation:	

Q. 10	**What is the name of the 1,3-isomer (or meta-isomer) of benzenediol with the chemical formula C6H4(OH)2?** **a) Resorcinol** ✓ **b) Catechol** ✗ **c) m-Cresol** ✗ **d) Glycerol** ✗
Explanation:	

Q. 11	**At normal temperature and atmospheric pressure, _____ has a density of 1.87 kg/m3, which is 1.5 times heavier than air and exists as a liquid below the critical temperature of 31°C.** **a) lithium** ✗ **b) hydrogen** ✗ **c) carbon dioxide** ✓ **d) nitrogen** ✗
Explanation:	

Q. 12	**Identify whether the given statements about p-block elements are correct or incorrect.** **Statement A: In p-block elements, the last electron enters the outermost p orbital.** **Statement B: The non-metals and metalloids exist only in the p-block of the periodic table.** **a) Only Statement B is correct** ✗ **b) Only Statement A is correct** ✗ **c) Both Statements A and B are incorrect** ✗ **d) Both Statements A and B are correct** ✓
Explanation:	

Q. 13	**Continental Shelf which is the shallowest part of the ocean has an average gradient of:** **a) 8° or even less** ✗ **b) 1° or even less** ✓ **c) 2° or even less** ✗ **d) 5° or even less** ✗
Explanation:	

Q. 14	**Which element of the boron family has a high boiling point, making it ideal for recording temperatures that would vaporise a thermometer?** **a) Aluminium** ✗ **b) Thallium** ✗ **c) Gallium** ✓ **d) Indium** ✗
Explanation:	

Q. 15	**Which German chemist was the first to show a graphical representation of the periodicity of an atomic volume plotted against atomic weight?** **a) William Ramsay** ✗ **b) Lothar Meyer** ✓ **c) Glenn T Seaborg** ✗ **d) John Newlands** ✗
Explanation:	

Q. 16	**Which of the following does NOT belong to the family of organic compounds?** **a) Furan** ✗ **b) Decane** ✗ **c) Ammonia** ✓ **d) Nonane** ✗
Explanation:	

Q. 17	**What is the IUPAC name of the organic compound depicted in the figure?** **a) 1-Methyl-3-Propylcyclohexane** ✓ **b) 1-Methyl-4-Propylcyclohexane** ✗ **c) 1-Methyl-1-Propylcyclohexane** ✗ **d) 1-Methyl-2-Propylcyclohexane** ✗
Explanation:	

Q. 18	**Which scientist synthesised an organic compound, urea, from an inorganic compound, ammonium cyanate?** **a) Berzelius** ✗ **b) Berthelot** ✗ **c) F Wohler** ✓ **d) Kolbe** ✗
Explanation:	

Q. 19	**Which of the following options are homogeneous mixtures?** **a) Solution, colloid, suspension, milk, toothpaste, salt water, brass** ✗ **b) Solution, colloid, milk, toothpaste, salt water, brass** ✗ **c) Colloid, suspension, milk, toothpaste** ✗ **d) Solution, salt water, brass** ✓
Explanation:	

Q. 20	**The preferred IUPAC name of Allyl bromide is:** **a) 2-Bromopropene** ✗ **b) 3-Bromopropene** ✓ **c) 1-Bromopantene** ✗ **d) 3-Bromobutene** ✗
Explanation:	

Q. 21	**From the given options, choose the one which is NOT a product of the decomposition reaction of Lead nitrate.** **a) Oxygen** ✗ **b) Nitrogen dioxide** ✗ **c) Nitrogen** ✓ **d) Lead oxide** ✗
Explanation:	

Q. 22	**In 1932, who discovered the positron, a particle described as 'carrying a positive charge but having a mass of the same order of magnitude as that normally possessed by a free negative electron'?** **a) Ernest Rutherford** ✗ **b) Carl Anderson** ✓ **c) Paul Dirac** ✗ **d) Niels Bohr** ✗
Explanation:	

Q. 23	**Why do pickles last longer?** **a) Only beneficial bacteria can grow in the pickle.** **b) Bacterial and fungal cells get plasmolysed in high salt concentration of pickle.** **c) The water content of the pickle protect the pickle from spoilage.** **d) Pickle is prepared in a vacuum so that no harmful bacteria can grow on it.**
Explanation:	

Q. 24	**Which radioactive element with atomic number 43 in the modern periodic table is unstable, and the half-lives of all its isotopes are relatively short, from 4.2 million years to 5.0 s?** **a) Promethium** **b) Neptunium** **c) Nobelium** **d) Technetium**
Explanation:	

Q. 25	**Which of the following is NOT a food preservative?** **a) Vinegar** **b) Aqua regia** **c) Sodium chloride** **d) Sodium nitrite**
Explanation:	

Q. 26	**What do you call the drugs that bind to the receptor site and inhibit its natural function?** **a) Antagonists** ✓ **b) Depressants** ✗ **c) Antidepressants** ✗ **d) Agonist** ✗
Explanation:	

Q. 27	**What is the full form of PPLO with respect to bacteria?** **a) Platelet Prone Like Organisms** ✗ **b) Pleuro Pneumonia Like Organisms** ✓ **c) Pneumonia Platelet Like Organisms** ✗ **d) Pleuro Platelet Like Organisms** ✗
Explanation:	

Q. 28	**Methyl ethyl ketone is also known as:** **a) methyl pentanone** ✗ **b) propanone** ✗ **c) 2-butanone** ✓ **d) 2-butanol** ✗
Explanation:	

Q. 29	**Which of the following is a primary arylamine in which an amino functional group is substituted for one of the benzene hydrogens?** **a) Toluidine** ✗ **b) Aniline** ✓ **c) Quinoline** ✗ **d) Pyridine** ✗
Explanation:	

Q. 30	**In 1784, who discovered the composition of water through his experiment with hydrogen and oxygen?** **a) Herbert C Brown** ✗ **b) Joseph Priestley** ✗ **c) Henry Cavendish** ✓ **d) John Dalton** ✗
Explanation:	

Q. 31	**Which of the following elements is a member of the actinoid series?** **a) Lutetium** ✗ **b) Magnesium** ✗ **c) Lanthanum** ✗ **d) Thorium** ✓
Explanation:	

Q. 32	**In 1957, who redefined a model that predicted the shape of individual molecules based on the extent of electron-pair electrostatic repulsion?** **a) Nyholm and Gillespie** ✓ **b) Heitler and London** ✗ **c) Staudinger and Perey** ✗ **d) Marcet and Pauling** ✗
Explanation:	

Q. 33	**In which process is a solid substance volatilised by heating and the vapour is condensed back to the solid at a cold surface?** **a) Chromatography** ✗ **b) Filtration** ✗ **c) Distillation** ✗ **d) Sublimation** ✓
Explanation:	

Q. 34	**Identify an anomaly element that belongs to both group 1 and group 17.** **a) Nitrogen** ✗ **b) Chlorine** ✗ **c) Hydrogen** ✓ **d) Oxygen** ✗
Explanation:	

Q. 35	**What do you call the type of drugs that mimic the natural messenger by switching on the receptor?** **a) Agonist** ✔ **b) Depressants** ✘ **c) Antidepressants** ✘ **d) Antagonists** ✘
Explanation:	