

## PPSC Chemistry Part II Organic Chemistry Online Test

| Sr | Questions   | Answers Choice  |
|----|---|---|
| 1  | The dye which is a constituent of Skiffs reagent used for detection formaldehyde group is.  | A. Gentain violet<br>B. <b>Magneta</b><br>C. Phenolphthalein<br>D. Rosolic acid   |
| 2  | Which of the following hydrocarbon cannot be obtained on reacting chloormethane with sodium metal in the presence of dry ether.   | A. C4 H10<br>B. C2H6<br>C. C2H4<br>D. <b>C3H8</b>   |
| 3  | Which of the following is not an androgen i.e. male sex hormones.   | A. Androsterone<br>B. Testosterone<br>C. <b>Oestrone</b><br>D. All of these are make hormone  |
| 4  | Which of the following reagent cannot be used to detect the phenolic group.   | A. Neutral FeCl3<br>B. <b>I2/NaOH</b><br>C. NaOH solution<br>D. Br2/H2O   |
| 5  | Dyes which can be applied to cellulosic fibre from water solution are called.   | A. Ingrain dyes<br>B. <b>Substantive dyes</b><br>C. Mordant dyes<br>D. Vat dyes   |
| 6  | Which of the following does not belong in the group of heterocyclic dyes.   | A. Acridine<br>B. Cyanine<br>C. Methylene blue<br>D. <b>Amido black</b>   |
| 7  | Monomer of natural rubber is  | A. 1,3-Butadiene<br>B. <b>2-Methyl -1,3-butadiene</b><br>C. 1,2 -Butadiene<br>D. 1,3 - Pentadiene   |
| 8  | The stationary and mobile phases in paper chromatography are.   | A. <sup>Liquid/Liquid</sup><br>B. <b>Solid /Liquid</b><br>C. Liquid/Solid<br>D. Gas/solid   |
| 9  | Suppose the activation energy of a certain reaction is 250 kJ/mol, If the rate constant at T1 =300 K is k1 and the rate constant at T2= 320 K is ks, then the reaction is _____ times faster at 320 K than at 300 K | A. $3 \times 10^{-29}$<br>B. 0.067<br>C. <b>525</b><br>D. 15.0  |
| 10 | When the concentration of reactant molecules is increased the rate of reaction increases. The best explanation is As the reactant concentration increases.  | A. The average kinetic energy of molecules increases.<br>B. <b>The frequency of molecular collisions increases</b><br>C. The rate constant increases<br>D. The activation energy increases  |
| 11 | Which configuration has lowest potential energy.  | A. Eclipsed<br>B. <b>Staggered</b><br>C. Skew<br>D. All have same energy  |
| 12 | What is the activation energy of a reaction whose rate constant increases by a factor of 100 upon increasing the temperature from 300 K to 360 K.   | A. 27<br>B. 35<br>C. 42<br>D. <b>69</b>   |
| 13 | When the colourless liquid chlorobenzene is shaken with bromine water, the chlorobenzene becomes a yellow-orange colour. Which of the following is the best interpretation of this.                                 | A. An addition compound of chlorobenzene and bromine has been formed.<br>B. The chlorine atom has been replaced by a bromine atom<br>C. <b>The bromine is more soluble in chlorobenzene than in water</b><br>D. A hydrogen atom has been replaced by a bromine atom |
| 14 | In propagation step the reaction intermediate of radical polymerization is  | A. Carbocation<br>B. <b>Carbonion</b><br>C. Radical<br>D. Cation  |

|    |   |   |
|----|---|---|
|    |   | C. Free radical<br>D. Carbene   |
| 15 | The base which is not present in DNA is   | A. Adenine<br>B. Guanine<br>C. Thymine<br>D. Cytosine   |
| 16 | Alkaline hydrolysis of chloroform produces.   | A. HCCO<br>B. HCOO - + CO<br>C. H <sub>3</sub> COH<br>D. CHCl <sub>2</sub> OH   |
| 17 | Carbon and Hydrogen are estimated by  | A. Liebig's method<br>B. Kjeldhal's method<br>C. Carries method<br>D. None of the above   |
| 18 | Ziegler -Natta catalyst is  | A. (C <sub>2</sub> H <sub>3</sub> ) <sub>3</sub> Al<br>B. TiCl <sub>4</sub><br>C. (C <sub>2</sub> H <sub>5</sub> ) <sub>3</sub> Al/TiCl <sub>4</sub><br>D. (C <sub>2</sub> H <sub>3</sub> ) <sub>3</sub> B/TiCl <sub>2</sub>          |
| 19 | The IUPAC name of HOCH <sub>2</sub> CH <sub>2</sub> CH <sub>2</sub> COOH is                                       | A. 4- formylbutanoic acid<br>B. 5- formylpentanoic acid<br>C. 4- carboxybutanal<br>D. 5- carboxypentanal  |
| 20 | During the preparation of ethane by Kolbe's electrolytic method using inert electrodes the pH of the electrolyte. | A. Increases progressively as the reaction proceeds<br>B. Decreases progressively as the reaction proceeds<br>C. Remains constant throughout the reaction<br>D. May decrease if the concentration of the electrolyte is not very high |