

## PPSC Chemistry Full Book Test

| Sr | Questions  | Answers Choice  |
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| 1  | The orientation of a crystalline surface is confidently defined in terms of.                   | A. Lijima Indices B. Miller indices C. Clausen indices D. None  |
| 2  | Which of the following techniques is bulk technique.   | A. Powder XRD B. Single Crystal XRD C. SEM D. TEM   |
| 3  | The suffix '-ene' in the name of fullerene shows the presence of in the molecule.              | A. One triple bond B. One double bond C. Two single bonds D. Two triple bonds   |
| 4  | Who prepared and explained nano tubes for the first time.                                      | A. Sumio Tijima B. Richard Smaley C. Erick Drexler D. Richard Feynamann   |
| 5  | The width of a carbon nano tube is nm  | A. 1<br>B. 1.3<br>C. 2.5<br>D. 10   |
| 6  | The capacity of normal human eye to see the smallest object is micro meter                     | A. 10000<br>B. 1000<br>C. 100<br>D. 10  |
| 7  | The thermal conductivity of an SWNT along length is watt/(m.k)                                 | A. 35<br>B. 330<br>C. 386<br>D. 3500  |
| 8  | In radial direction the thermal conductivity of a nano tube is watt/(m.k)                      | A. 3500<br>B. 385<br>C. 0<br>D. 350   |
| 9  | The electrical conductivity of a nano tube is times that of copper.                            | A. 10<br>B. 100<br>C. 1000<br>D. 1/100  |
| 10 | In compressive strength of a nanotube its tensile strength.                                    | A. I less than B. Is greater than C. Is equal to D. Less than or equal to.  |
| 11 | The smallest cluster of carbon atoms in Bucky balls known till today consists of carbon atoms. | A. 75<br>B. 20<br>C. 60<br>D. 15  |
| 12 | Which ratio decides the efficiency nano substance.   | A. Weight /volume B. Surface area/volume C. Volume/weight D. Pressure/volume  |
| 13 | What does 'F' stand for in AFM.  | A. Fine B. Front C. Force D. Flux   |
| 14 | The full form of STM is  | A. Scanning Tunneling Microscope B. Scientific Technical Microscope C. Systematic Technical Microscope D. SuperTensile Microscope |
| 15 | The width of a typical DNA molecule isnm   | A. 1<br>B. 2<br>C. 5<br>D. 10   |

| 16 | Which of the following does not apply to nanotechnology.  | A. It is a general purpose technology     B. It can be called Green technology     C. Newtonian mechanics can describe it.     D. It involves rearrangement of atoms |
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| 17 | Who was the first scientist to describe that substance having Nano dimensions possess altogether different and unique properties. | A. Richard Feynamann B. Erick Drexler C. Archimedes D. Michael Faraday   |
| 18 | Egyptians were using to prepare make up for eyes.   | A. Nanoaluminium B. Nanocopper C. Nanosteel D. Nanolead  |
| 19 | Greeks and Romans had used nanoparticles in the manufacture of.   | A. Cosmetics for eyes B. Medicines C. <div>Metals</div> D. Hair -dye   |
| 20 | Nanoscience can be studied with the help of   | A. Quantum mechanics B. Newtonain mechanics C. Macro dynamics D. Grophysics  |
| 21 | Who coined the word nanotechnology.   | A. Eric Drexler B. Richard Feynamann C. Sumio tijma D. Richard smalley   |
| 22 | Which of the microscope techniques is similar to the Atomic Force Microscopy (AFM)  | A. Scanning Electron Microscopy B. Scanning Tunneling Microscopy C. Transmission Electron Microscopy D. None of the above  |
| 23 | Fullerene or bucky ball is made up of carbon atoms.   | A. 100<br>B. 20<br>C. 75<br>D. 60  |
| 24 | The size of nanoparticles is betweennm  | A. 100 to 1000<br>B. 1 to 100<br>C. 0.1 to 10<br>D. 0.01 to 1  |
| 25 | In a bucky ball each carbon atom in bound in adjacent carbon atoms.   | A. 1<br>B. 2<br>C. 3<br>D. 4   |
| 26 | The ration of thermal conductivity of silver to that of a carbon nanotube is.   | A. 100 : 1<br>B. 1 :100<br>C. 10:1<br>D. 1:10  |
| 27 | The tensile strength of a carbon nanotube is times that of steel.   | A. 10<br>B. 25<br>C. 100<br>D. 1000  |
| 28 | The diameter of fly ash particles is micro meter  | A. 5-10<br>B. 10-20<br>C. 20-30<br>D. 100  |
| 29 | Nano technology in other words is.  | A. Carbon engineering B. Atomic engineering C. Small technology D. Microphysics  |
| 30 | are the extensions of bucky balls.  | A. Goodesic domes B. Hexagons C. Carbon nanotubes D. AFM and STM   |