

## PPSC Chemistry Part VII NanoChemistry Online Test

Sr	Questions	Answers Choice
1	Nano technology in other words is.	A. Carbon engineering B. Atomic engineering C. Small technology D. Microphysics
2	"There is a plenty of room at the bottom" This was stated by	A. Issac Newton B. Albert Einstein C. Richard Feynman D. Eric Drexler
3	1 nanometre = _____ cm	A. $10^{-9}$ B. $10^{-8}$ C. $10^{-7}$ D. $10^{-6}$
4	The electrical conductivity of a nano tube is _____ times that of copper.	A. 10 B. 100 C. 1000 D. 1/100
5	Attention should be focused on qualitative changes in particle properties as a function of.	A. Particle numebrs B. Particle mass C. Particle size D. Particle density
6	When fullerenes were discovered they were thought to be	A. First example of spherical aromatic molecule B. First example of spherical non aromatic molecule C. First example of diamond like molecule D. None of the above
7	Length of semiconductor nanorods are in the range of.	A. 1.50 nm B. 1-50 micro meter C. 100-500 nm D. 50-100 nm
8	_____ are the extensions of bucky balls.	A. Goodesic domes B. Hexagons C. Carbon nanotubes D. AFM and STM
9	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
10	What is a buckyball	A. A carbon molecule B. Nickname for Mercedes -Benz's futuristic concept car (CIII) C. Plastic explosives nanoparticle (C4) D. Concrete nanoparticle with a compressive strength of 20 nanonewtons(C20)
11	The thermal conductivity of an SWNT along length is _____ watt/(m.k)	A. 35 B. 330 C. 386 D. 3500
12	The capacity of normal human eye to see the smallest object is _____ micro meter	A. 10000 B. 1000 C. 100 D. 10
13	How many oxygen atoms lined up in a row would fit in a one nanometer space.	A. None an oxygen atoms is bigger than 1 nm B. One C. Seven D. None of the above
14	In a bucky ball each carbon atom is bound in _____ adjacent carbon atoms.	A. 1 B. 2 C. 3

		<p>C. 3</p> <p>D. 4</p>
15	The size of quantum dot is _____m	<p>A. 5</p> <p>B. <math>5 \times 10^{-9}</math></p> <p>C. <math>5 \times 10^{-10}</math></p> <p>D. <math>5 \times 10^{-11}</math></p>
16	1 meter = _____ nm	<p>A. <math>10^9</math></p> <p>B. <math>10^{-9}</math></p> <p>C. <math>10^{10}</math></p> <p>D. <math>10^{-10}</math></p>
17	The particles of about 1 nm need _____ activation energy to enter either aggregation processes or reactions to give to new chemicals.	<p>A. Higher</p> <p>B. Lesser</p> <p>C. No</p> <p>D. All above</p>
18	What exactly is quantum dot	<p>A. A semiconductor nanostructure that confines the motion of conduction band electrons, valence band holes or excitation in all three spatial directions</p> <p>B. The sharpest possible tip of an atomic force microscope</p> <p>C. A fictional term used in science fiction for the endpoints of wormholes</p> <p>D. Unexplained spots that appear electron microscopy images of nanostructures smaller than 1 nanometer</p>
19	The hardest material found in nature is	<p>A. Steel</p> <p>B. Topaz</p> <p>C. Diamond</p> <p>D. Quartz</p>
20	Formation of nano particles involves process lime	<p>A. Foramtion of metal nuclei on different sizes.</p> <p>B. Interaction among the formed particles</p> <p>C. Both A and B</p> <p>D. No interaction among the nano particles synthesized</p>