



भारतीय नाभिकीय विद्युत निगम लिमिटेड  
BHARATIYA NABHIKIYA VIDYUT NIGAM LIMITED  
(भारत सरकार का उद्यम / A Government of India Enterprise)

कल्पाक्कम/ Kalpakkam - 603 102

काँचीपुरम जिला (तमिलनाडु)/ Kancheepuram Dt.(TN)

Sample Question for the Written Examination for the post of Scientific Assistant/B (CHEMISTRY)

1	In an Isochoric Process A) Pressure remains constant    B) Temperature remains constant C) Volume remains constant    D) Energy remains constant
2	Which among the following salt shows a decreasing solubility in water with an increase of temperature A) $\text{NH}_4\text{Cl}$ B) $\text{KNO}_3$ C) $\text{NaCl}$ D) $\text{CaSO}_4$
3	All cyclic engines working reversibly between the same temperature of source and sink have the same efficiency. This is the statement of A) Efficient engine    B) Carnot Theorem C) Carnot Cycle    D) 2 <sup>nd</sup> law of Thermodynamics
4	The catalyst increase the rate of reaction because A) It provides the necessary energy to the colliding molecules B) It decreases the heat of the reaction C) It decreases the order of the reaction D) It provides the path for lowering the activation energy
5	If 6 gram of radioactive isotope is decayed from 12 gram in the first hour. The amount in gram that will decay in the second hour will be A) 6    B) 4.5    C) 3    D) 1.5
6	Which is heavier among the following A) 25 gram of mercury    B) two moles of $\text{CO}_2$ C) two moles of $\text{H}_2\text{O}$ D) one mole of Chlorine
7	Given that one mole of $\text{N}_2$ at NTP occupies 22.4L, the density is A) 1.25    B) 0.8    C) 1.5    D) 1.6
8	The shape of $dsp^2$ orbital is A) Tetrahedral    B) Trigonal    C) Square planer    D) Octahedral
9	Helium is added to oxygen supply used by deep sea divers because. A) It is lighter than nitrogen B) It is not liquefied easily even at higher pressure C) It is less soluble at high pressure D) It is readily miscible with oxygen
10	Stainless steel contains A) Cr & Co    B) Cr & Ni    C) Ni & Co    D) Cr & Cu

