भारतीय नाभिकीय विद्युत निगम लिमिटेड
BHARATIYA NABHIKIYA VIDYUT NIGAM LIMITED
(भारत सरकार का उद्यम / A Government of India Enterprise)
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Sample Question for the Written Examination for the post of Scientific Assistant/B (MECHANICAL)

1	Zeroth law of thermodynamics defines the concept of (A) Internal Energy (B) Heat (C) Temperature (D) Entropy
2	The unit of Brinell hardness number is (A) No unit (B) kgf/cm (C) kgf/cm^2 (D) N/m^3
3	Hydraulic turbine converts (A) Mechanical energy into kinetic energy (B) Mechanical energy into Hydraulic energy (C) Hydraulic energy into Mechanical energy (D) Pressure energy into kinetic energy
4	Method used to produce internal gears (A) Hobbing (B) Shaper with pinion cutter (C) Milling (D) Shaper with rack cutter
5	Which of the following compression process consumes more power (A) Isothermal (B) Adiabatic (C) Irreversible adiabatic (D) Isentropic
6	Factor of safety is the ratio of (A) Yield stress to working stress (B) Maximum stress to Yield stress (C) Ultimate stress to working stress (D) Ultimate stress to Yield stress
7	The effect of friction in steam nozzle is to (A) Increase dryness fraction (B) Decrease dryness fraction (C) Decrease specific volume (D) None of the Above
8	Entropy of universe increases by (A) Isentropically (B) Adiabatically (C) Irreversible Adiabatic (D) Throttling
9	Strain is defined as (A) Change in dimension / original dimension (B) Change in area (C) Elongation of material (D) Stress x Young's Modulus
10	In refrigeration the heat rejection is ..... heat absorption (A) More than (B) Less than (C) Equal to (D) All of the above
11	Section modulus is the ratio of (A) J/y (B) J/y^2 (C) M/I (D) I/y

12	Which one of the following is low carbon steel (A) Alloy steel (B) HSS (C) Cast iron (D) Mild steel
13	Internal threads are manufactured by (A) Thread cutting (B) Taping (C) Punching (D) Reaming
14	Gas turbine power plant works on (A) Carnot cycle (B) Brayton cycle (C) Otto cycle (D) Stirling cycle
15	The firing order of 4-cylinder engine is (A) 1-2-3-4 (B) 1-4-3-2 (C) 4-1-2-3 (D) 4-3-2-1