## **IIT JAM 2023 Physics Question Paper (Memory Based)**

**Question.** If potential of sphere of radius R is V and potential of concentric sphere of radius 2R is 2V. Then find the potential at distance 3R/2

**Question.** If ground state energy of infinite potential well of length L1 is equal to second excited state energy of another infinite potential well of length L2 . Then what is ratio L1/L2?

**Question.** Energy band diagram with Fermi energy level for extrinsic p type semiconductor

**Question.** Sum of Eigen value 7.75

Question. What is the trace of I+A+A<sup>2</sup>

Question. Directional based question of 220 related to XY plane

**Question.** Fermi dirac clasical and bosonic particle will apply same pressure or diffrent pressure when kept in container?

**Question.** Compressibility factor k and beta are given. If dv/v is perfect differential which relation is correct?

**Question**. Relation between dB/dp and dK/dT

Question. Vicosity of dilute ideal gas?

**Question.** f(x)=|x|-1| then graph of f(x)?

**Question.**  $\beta$  = 100 ,base side R1 and R2 or Vc, Find VCC.

**Question.** What is RMS speed / Vmost probable ratio

Question. Eigen value of I+A+A<sup>2</sup> ka

