

	PSC QUIZ 1 dt 01-09-2023	
	Name: _____ Roll No. _____	
Q1	Temperature dependence of the bandgap (in Si for example)	
Q2	Kronig-Penny model at P goes to infinity	
Q3	Plot Lattice constant versus bandgap	
Q4	Ionization energies of the dopant atoms	
Q5	Si crystal structure	
Q6	Intrinsic carrier concentration	
Q7	Zincblende vs Wurtzite structure	

Q8	Fermi function at different temperature	
Q9	Si crystal is transparent in which part of the spectrum?	
Q10	Drift-Diffusion equation in semiconductors	
Q11	An energy band is a) a set of continuous energies b) a set of closely spaced allowed energy levels c) a set of widely spaced allowed energy levels d) none of the above	
Q12	The donor impurity levels lie a) just above the valence band b) just below the conduction band c) at the centre of forbidden band d) just above the conduction band	
Q13	Compensated semiconductor	
Q14	Direct vs indirect bandgap in semiconductors	
Q15	Unit of mobility in CGS units.	