

(2) At a point on the surface of the sphere

Q-5	Attempt all questions	(14)
a	Explain Hall effect in detail	08
b	Deduce the relation between Magnetic Susceptibility and Permeability	06
Q-6	Attempt all questions	(14)
a	Differentiate between Paramagnetic and Diamagnetic Substances	07
b	Discuss on the term Hysteresis Loop in detail	07
Q-7	Attempt all questions	(14)
a	Explain in detail Ferro magnetic materials	06
b	Give an account on energy loss due to hysteresis	08
Q-8	Attempt all questions	(14)
a	Differentiate between Self and Mutual Inductance, derive $M = \sqrt{L_1 L_2}$, where M is mutual inductance, L_1 and L_2 are self-inductances of two coils.	07
b	Write a note on magnetic field due to a current carrying conductor	07

