Section-A

Ques 1:- Maxwell equation in vacuum & non conducting medium?

→ ~~Maxwell equation in vacuum~~ :-

Maxwell first equation :-

$$q \left(= \int_V \rho \, dv \right)$$

Second equation :- ~~$q = \int \rho dv$~~.

net outward flux of magnetic induction through a surface enclosing a volume is equal to 0.

→ non-existence

(3) Maxwell 3rd eq".

$$\text{emf} \left(= \int_C \vec{E} \cdot d\vec{l} \right)$$

$$\text{flux} = \left(- \int_S \vec{B} \cdot d\vec{S} \right)$$

(4) Maxwell fourth eq^{n} :-

$$\int_C \vec{H} \cdot d\vec{l} = \text{Sum of conduction current \& displacement}$$