Solution of DPP – 3

Link to View Video Solution: Click Here

1. (i) Non-Uniform

(ii) $|q| \propto$ No of E.F.L.

$$\frac{q_A}{q_B} = \frac{12}{8} = \frac{3}{2}$$

(iii) E.F.L originate from q_A & teriminate on q_B so q_A = +ive & q_B =-ive

(iv) E at c is zero

so c is neutral point

(v) E.F.L terminate on – ive charge are infinite.

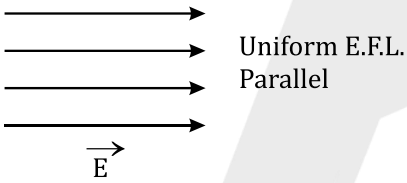
2. E.F.L originate from 1 & 3

& terminate on 2.

So 1 & 3 is + ive

& 2 is – ive.

3.



4. Strength of Electric Field $\propto$ density of E.F.L

$E_A > E_B$

5. Electric field lines Perpendicular to equipotential surface

6. E. F. L terminate on q_1 & q_2

So both are negative.

7. From Property of E.F.L.

Option – B

8. Option – D