

DPP CAPACITANCE

- Which material sheet should be placed between the plates of a parallel plate condenser in order to increase its capacitance?
(a) mica (b) copper (c) tin (d) iron
- Three condensers each of capacitance 2F, are connected in series. The resultant capacitance will be
(a) 6F (b) 5F (c) 2/3F (d) 3/2F
- What will be the area of pieces of paper in order to make a paper condenser of capacitance $0.04 \mu\text{F}$, if the dielectric constant of paper is 2.5 and its thickness is 0.025mm?
(a) 1 m^2 (b) $2 \times 10^{-3} \text{ m}^2$
(c) $4.51 \times 10^{-3} \text{ m}^2$ (d) 10^{-3} m^2
- The energy acquired by a charged particle of $4 \mu\text{C}$ when it is accelerated through a potential difference of 8 volt will be
(a) 3.2×10^{-7} (b) 3.2×10^{-5}
(c) $2 \times 10^{-6} \text{ J}$ (d) 2×10^{-5}
- The effective capacitance between the points x and y in the will be
(a) $1 \mu\text{F}$ (b) $1.5 \mu\text{F}$
(c) $2 \mu\text{F}$ (d) $4 \mu\text{F}$

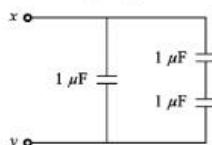


Fig. 21.50

- The equivalent capacitance in the adjoining diagram will be

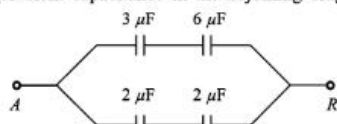


Fig. 21.51

- The equivalent capacitance in the adjoining diagram will be
(a) $13 \mu\text{F}$ (b) $36/13 \mu\text{F}$
(c) 7 mF (d) $3 \mu\text{F}$
- The capacitance of a parallel plate capacitor is $4 \mu\text{F}$. If a dielectric material of dielectric constant 16 is placed between the plates then the new capacitance will be
(a) $1/64 \mu\text{F}$ (b) $0.25 \mu\text{F}$
(c) $64 \mu\text{F}$ (d) $40 \mu\text{F}$