CUET 2026 May 29 Shift 1 Physics

Question Paper (Memory-Based)

Conducted by National Testing Agency (NTA)

General Instructions

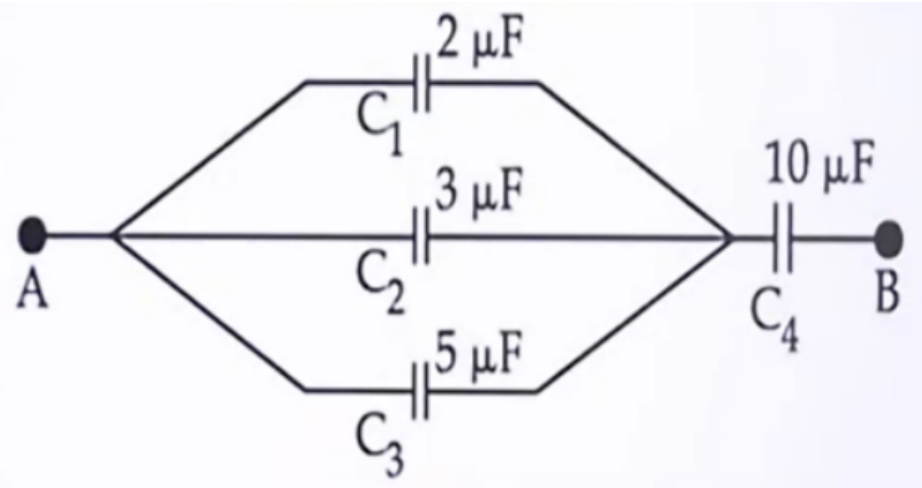
(i) The examination will be conducted in Computer-Based Test (CBT) mode.

(ii) Each question carries +5 marks for correct answer and -1 mark for wrong answer.

(iii) The total number of questions are 50.

(iv) Duration of the exam is 1 hour (60 minutes).

1. Four capacitors are connected as shown in the figure. If $C_1 = 2\,\mu F$, $C_2 = 3\,\mu F$, $C_3 = 5\,\mu F$ and $C_4 = 10\,\mu F$, then the equivalent capacitance between points A and B is:



(A) $20\,\mu F$

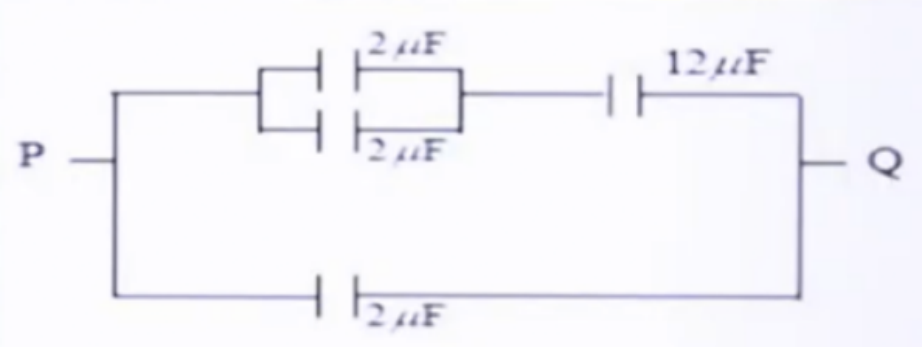
(B) $5\,\mu F$

(C) $10\,\mu F$

(D) $0\,\mu F$

---

2. Four capacitors are connected in a circuit as shown in the figure. The effective capacitance between P and Q is:



(A) $10\,\mu F$

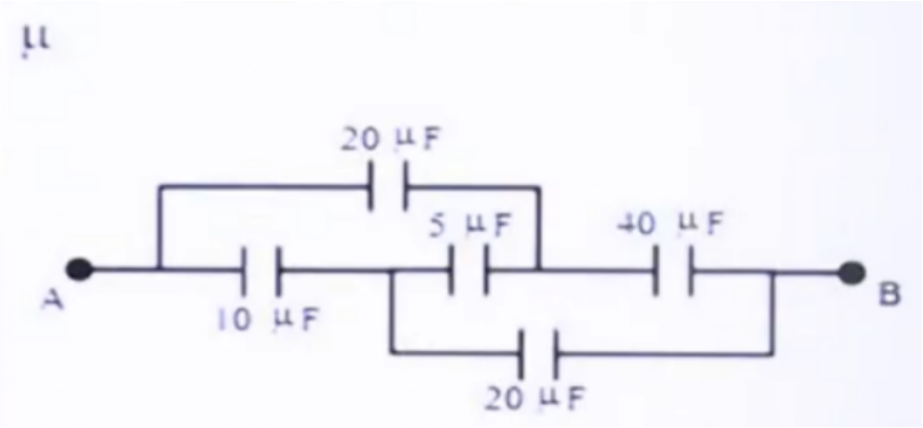
(B) $5\,\mu F$

(C) $2\,\mu F$

(D) $7.5\,\mu F$

---

3. In the figure given below, the resultant capacitance between points A and B is:



(A) $20\,\mu F$

(B) $\frac{20}{3}\,\mu F$

(C) $\frac{40}{3}\,\mu F$

(D) $10\,\mu F$

---

4. Three capacitors have capacitances $2\,\mu F$, $4\,\mu F$ and $8\,\mu F$. When they are connected in a way to give minimum capacitance, their effective capacitance is:

(A) $8\,\mu F$

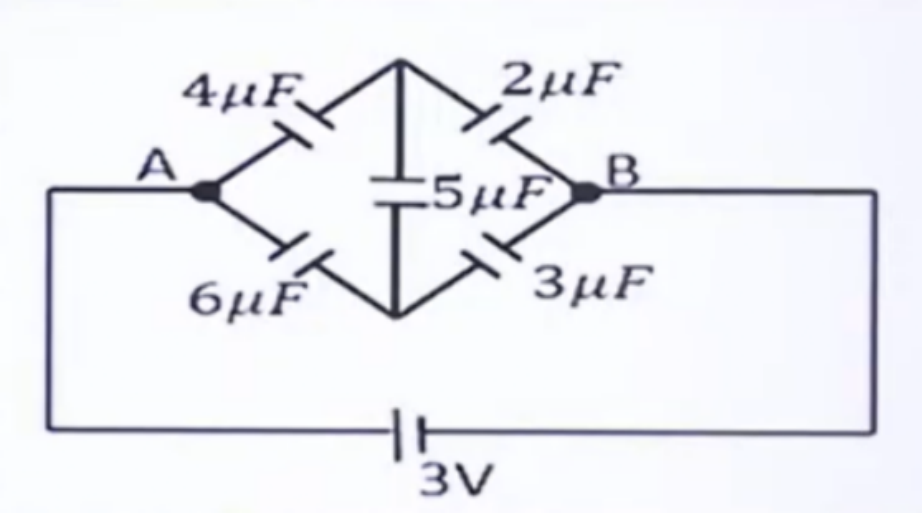
(B) $14\,\mu F$

(C) $1.14\,\mu F$

(D) $11.4\,\mu F$

---

5. A network of five capacitors is shown in the figure. The total charge stored in the network connected between A and B is:



(A) $8\,\mu C$

(B) $10\,\mu C$

(C) $9\,mC$

(D) $10\,mC$

---

6. A $12\,pF$ capacitor is connected to a $50\,V$ battery. The electrostatic energy stored in the capacitor is:

(A) $2.5 \times 10^{-6}\,J$

(B) $3.5 \times 10^{-8}\,J$

(C) $2.5 \times 10^{-8}\,J$

(D) $1.5 \times 10^{-8}\,J$

---

7. A $10\,pF$ capacitor is connected to a $24\,V$ battery. The electrostatic energy stored in the capacitor is:

(A) $11.52 \times 10^{-9}\,J$

(B) $1.2 \times 10^{-9}\,J$

(C) $5.76 \times 10^{-9}\,J$

(D) $2.88 \times 10^{-9}\,J$

8. A wire of uniform cross-section A, length l and resistance R is bent into a complete circle. The equivalent resistance between any two diametrically opposite points will be:

(A) $\frac{R}{4}$
(B) $\frac{R}{8}$
(C) $4R$
(D) $\frac{R}{2}$

---

9. A uniform wire of resistance R is cut into four equal parts. These parts are then connected in parallel. The equivalent resistance of the combination is:

(A) R
(B) $\frac{R}{4}$
(C) $\frac{R}{16}$
(D) $4R$

---

10. Four resistors of $8\,\Omega$ each are connected in parallel. Then five such equivalent combinations are connected in series. What will be the total resistance?

(A) $10\,\Omega$
(B) $2\,\Omega$
(C) $12\,\Omega$
(D) $2.5\,\Omega$
