

CUET 2026 May 29 Shift 1 Physics

Question Paper (Memory-Based)

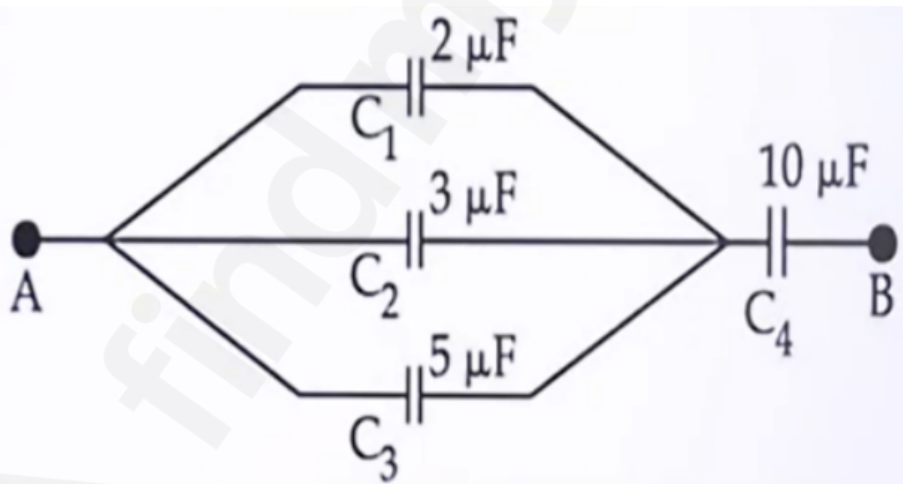
Conducted by National Testing Agency (NTA)



General Instructions

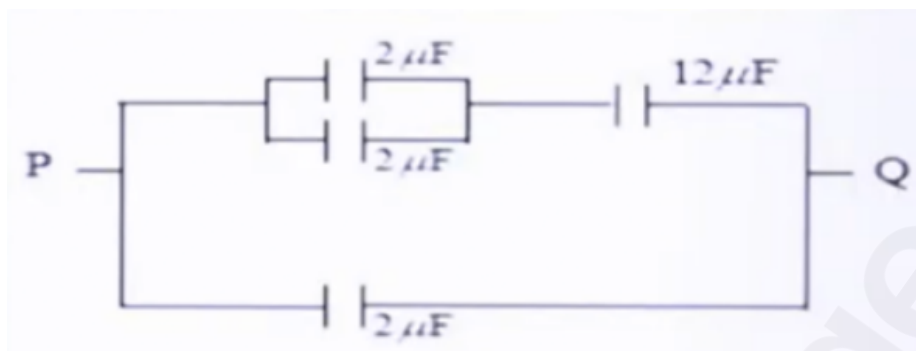
- (i) The examination will be conducted in Computer-Based Test (CBT) mode.
- (ii) Each question carries +5 marks for correct answer and -1 mark for wrong answer.
- (iii) The total number of questions are 50.
- (iv) Duration of the exam is 1 hour (60 minutes).

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:



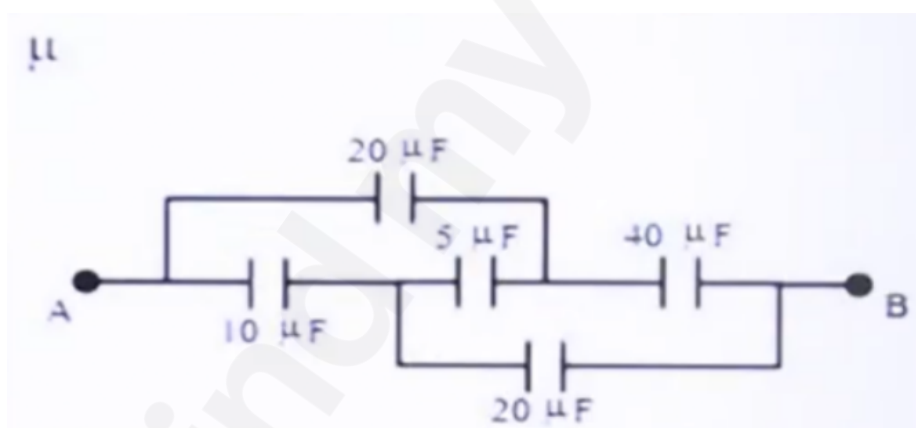
- (A) $20\ \mu F$
- (B) $5\ \mu F$
- (C) $10\ \mu F$
- (D) $0\ \mu F$

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:



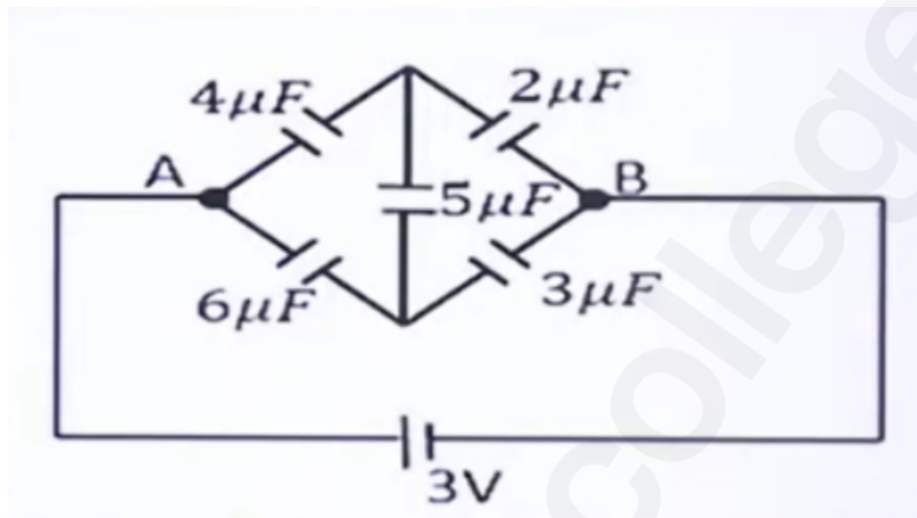
- (A) $20 \mu F$
 (B) $\frac{20}{3} \mu F$
 (C) $\frac{40}{3} \mu F$
 (D) $10 \mu F$

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) $9mC$
 (D) $10mC$

6. A $12pF$ capacitor is connected to a $50V$ 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 $10pF$ capacitor is connected to a $24V$ 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 8Ω each are connected in parallel. Then five such equivalent combinations are connected in series. What will be the total resistance?

- (A) 10Ω
 - (B) 2Ω
 - (C) 12Ω
 - (D) 2.5Ω
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