

PYQSide

NEET ELECTROSTATIC POTENTIAL AND CAPACITANCE — CAPACITORS AND CAPACITANCE, PARALLEL PLATE CAPACITOR — PYQS

Max. Marks: 20

Questions: 5

Section A (MCQ)

- Q.1** If the plates of a parallel plate capacitor connected to a battery are moved close to each other, then
- the charge stored in it, increases.
 - the energy stored in it, decreases.
 - its capacitance increases.
 - the ratio of charge to its potential remains the same.
 - the product of charge and voltage increases.
- Choose the most appropriate answer from the options given below: [NEET (UG) 2024]
- A, B and E only
 - A, C and E only
 - B, D and E only
 - A, B and C only

Scan or tap for the full solution



- Q.2** The capacitance of a capacitor with charge q and a potential difference V depends on
- [RE-NEET (UG) 2024]
- both q and V
 - the geometry of the capacitor
 - q only
 - V only

Scan or tap for the full solution



- Q.3** The distance between the two plates of a parallel plate capacitor is doubled and the area of each plate is halved. If C is its initial capacitance, its final capacitance is equal to [NEET (UG) 2022 (Phase 2)]
- $\frac{C}{4}$
 - $2C$
 - $\frac{C}{2}$
 - $4C$

Scan or tap for the full solution



- Q.4** The electrostatic force between the metal plates of an isolated parallel plate capacitor C having a charge Q and area A , is [NEET 2018]

- Independent of the distance between the plates
- Linearly proportional to the distance between the plates
- Proportional to the square root of the distance between the plates
- Inversely proportional to the distance between the plates

Scan or tap for the full solution



- Q.5** A parallel plate air capacitor is charged to a potential difference of V volts. After disconnecting the charging battery the distance between the plates of the capacitor is increased using an insulating handle. As a result the potential difference between the plates [AIPMT 2006]
- increases
 - decreases
 - does not change
 - becomes zero

Scan or tap for the full solution



ANSWER KEY

Ques.	1	2	3	4	5						
Ans.	2	2	1	1	1						