



Padalsalai's Telegram Groups!

(தலைப்பிற்கு கீழே உள்ள லிங்கை கிளிக் செய்து குழுவில் இணையவும்!)

- **Padalsalai's NEWS - Group**
https://t.me/joinchat/NIfCqVRBNj9hhV4wu6_NqA
- **Padalsalai's Channel - Group**
<https://t.me/padasalaichannel>
- **Lesson Plan - Group**
<https://t.me/joinchat/NIfCqVWwo5iL-21gpzrXLw>
- **12th Standard - Group**
https://t.me/Padalsalai_12th
- **11th Standard - Group**
https://t.me/Padalsalai_11th
- **10th Standard - Group**
https://t.me/Padalsalai_10th
- **9th Standard - Group**
https://t.me/Padalsalai_9th
- **6th to 8th Standard - Group**
https://t.me/Padalsalai_6to8
- **1st to 5th Standard - Group**
https://t.me/Padalsalai_1to5
- **TET - Group**
https://t.me/Padalsalai_TET
- **PGTRB - Group**
https://t.me/Padalsalai_PGTRB
- **TNPSC - Group**
https://t.me/Padalsalai_TNPSC

**MOUNT CARMEL MATRIC HR SEC SCHOOL
PHYSICS LEESON 1 & 2 TEST**

STD 12

I ANSWER FOLLOWING QUESTIONS 10X2=20

- 1. What are the differences between Coulomb force and gravitational force?**
- 2. The electric field lines never intersect. Justify.**
- 3. What is the general definition of electric dipole moment**
- 4. Define 'electric flux' and give units**
- 5. What is corona discharge?**
- 6. What is dielectric strength?**
- 7. What is Polarisation?**
- 8. Difference between polar and non polar molecule?**
- 9. why is safer inside during lightning and thunder?**
- 10. state coloumb's law**

II ANSWER THE FOLLOWING QUESTIONS 6X3=18

- 11. Derive an expression for the torque experienced by a dipole due to a uniform electric field.**
- 12. Derive an expression for electrostatic potential due to a point charge.**
- 13. Obtain the expression for energy stored in the parallel plate capacitor**
- 14. Explain the determination of the internal resistance of a cell using voltmeter.**
- 15. Applications of Seebeck effect**
- 16. Derive an expression Capacitance of a parallel plate capacitor**

**MOUNT CARMEL MATRIC HR SEC SCHOOL
PHYSICS LEESON 1 & 2 TEST**

STD 12

III ANSWER THE FOLLOWING QUESTIONS 4X5=20

- 17 Derive an expression for electrostatic potential due to an electric dipole**
- 18 Explain in detail the construction and working of a Van de Graaff generator**
- 19 . Describe the microscopic model of current and obtain general form of Ohm's law**
- 20. How the emf of two cells are compared using potentiometer?**

DEPARTMENT OF PHYSICS

MOUNT CARMEL MATRIC HR SEC SCHOOL , KALLAKURICHI -04151220250

Padasalai

CONFIDENTIAL

UNIT -8 ATOMIC PHYSICS
SLIP TEST -3

MARKS.35

II ANSWER THE FOLLOWING QUESTIONS

5X2=10

1. What are cathode rays?
2. What is meant by excitation energy
3. Define the ionization energy and ionization potential
4. Define wave number and give its equation
5. Draw the graph Variation of velocity of the electron in the orbit with principal quantum number

II ANSWER THE FOLLOWING QUESTIONS

5x3=15

1.

**Find the (i) angular momentum
(ii) velocity of the electron in the 5th orbit
of hydrogen atom.**

($h = 6.6 \times 10^{-34}$ Js, $m = 9.1 \times 10^{-31}$ kg)

2. Discuss the spectral series of hydrogen atom.
3. Write three postulates of Bohr atom model
4. Derive expression of the energy of an electron in the n^{th} orbit
5. Write the properties of cathode rays

III ANSWER THE FOLLOWING QUESTIONS

2x5=10

1. Explain the J.J. Thomson experiment to determine the specific charge of electron
2. Derive expression of **Radius of the orbit of the electron and velocity of the electron** in Bohr atom model

DEPARTMENT OF PHYSICS
MOUNT CARMEL MATRIC HR SEC SCHOOL
KALLAKURICHI -04151-220250