

VIDYAPEETH



BATCH CODE: 19-PJ301EA 2025

SUBJECT NAME: CHEMISTRY

CHAPTER NAME:
Atomic Structure

ATDB.uno



Lecture No.

01

By – Swapnil Sir



Today's Goal



Subtopic

discovery of Electron | Proton | neutrons.

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Atomic Structure →

Atomika → That can not be decide further

Atom



→ Conduction through gases

discharge tube

10^{-4}



→ Cathode rays →

electrons



→ Anode rays →

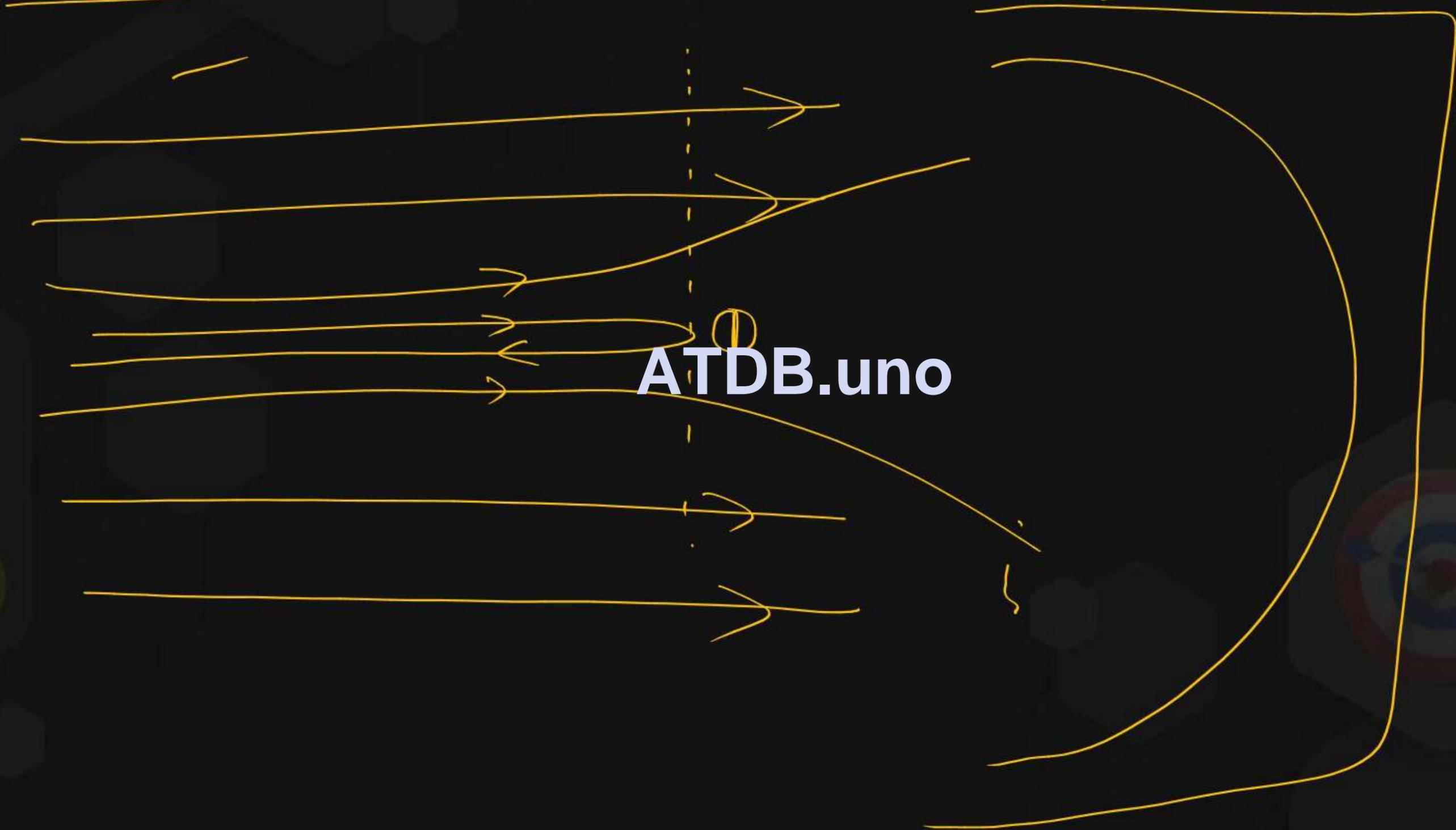
protons



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neutrons → Chadwick

Rutherford α -particle scattering exp_o → Gold foil (p+n)



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Maxwell → Electro-magnetic radiation Drawback of
Rutherford's model



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Bohr's Model

$$mvr = n \left(\frac{h}{2\pi} \right)$$

$n = 1, 2, 3,$

$$\frac{h}{2\pi}$$

$$\frac{2h}{2\pi}$$

$$\frac{3h}{2\pi}$$

$$\frac{4h}{2\pi}$$

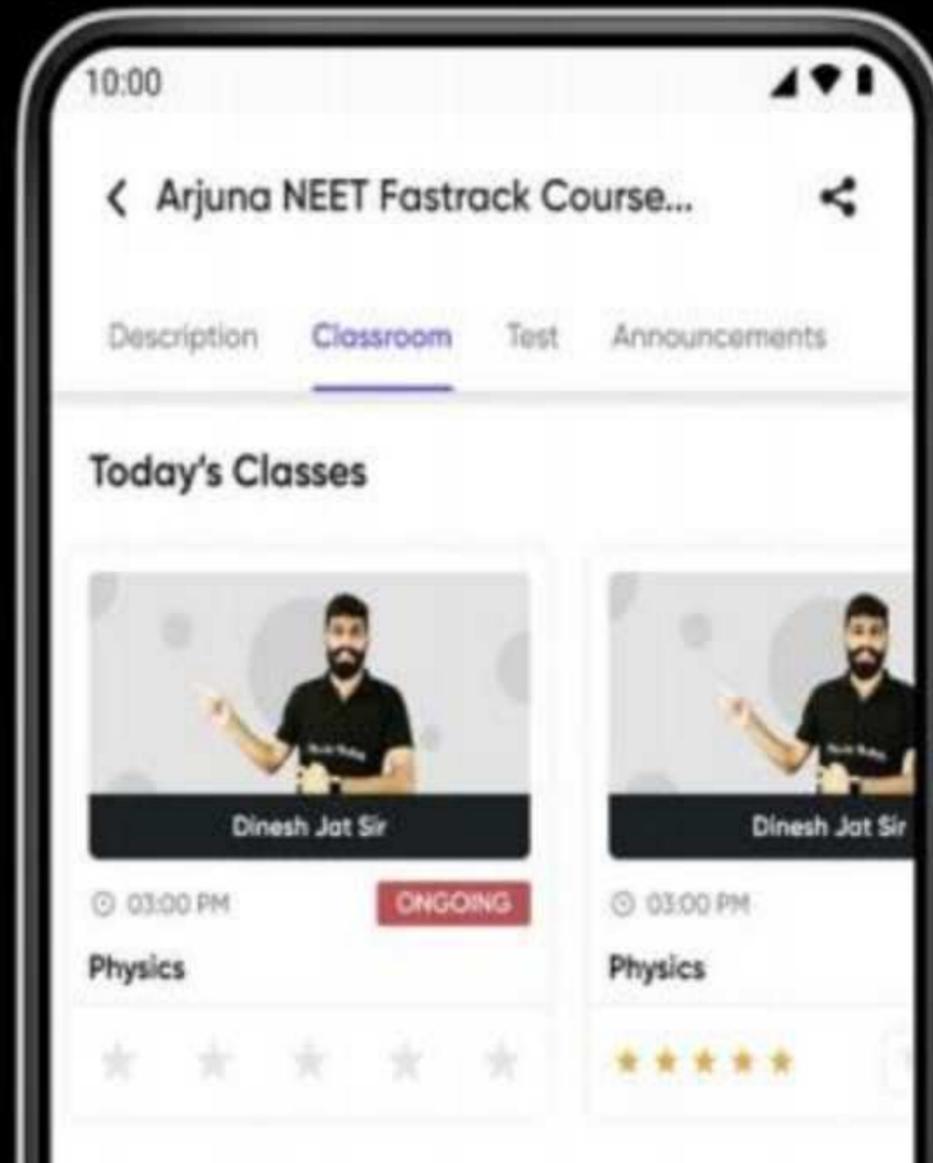
$h =$ Universal Planck's constant



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Solve the DPP and check Solution



"SCAN" to join our "TELEGRAM" channel

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WORK, POWER AND ENERGY

DPP-1 (JAP/046)

[Introduction, Definition of work, work done by constant force, Area under force-displacement curve]

<p>1. A particle moves from position $\vec{r}_1 = 3\hat{i} + 2\hat{j} - 6\hat{k}$ to position $\vec{r}_2 = 14\hat{i} + 13\hat{j} + 9\hat{k}$ under the action of force $-4\hat{i} + \hat{j} + 3\hat{k}$ N. The work done by this force will be</p> <p>(A) 100 J (B) 50 J</p>	<p>(A) 8×10^{-2} joules (B) 16×10^{-2} joules (C) 4×10^{-4} joules</p>
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Thank You!!!!

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