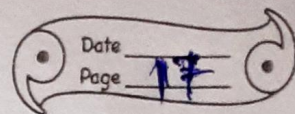


H.W
30.6.24

ASSIGNMENT



Q.1. Give differences between plasma state & BEC giving examples.

Ans- Plasma

→ Plasma is a phase of matter where gas ions & free electrons exist.

→ Plasma may be formed by heating & ionizing a gas.

→ E.g.:- lightning, sun, stars, etc.

BEC

→ Bose Einstein condensation is a state of matter in which gas of boson occurs at a low temperature close to absolute zero.

→ BEC is formed by cooling a gas of extremely low density.

E.g.:- Superconductors & superfluids.

Q.2. Convert the following temperature measures.

$473\text{K} =$ _____ deg. Fahrenheit

Ans- $473\text{K} = 473 - 273$ (Kelvin to Celsius)
 $=$ 200°C

Celsius to Fahrenheit

$$\Rightarrow \frac{9}{5} (\cancel{200}^{\circ}\text{C}) + 32 = \left(\frac{9}{5} \times 200 \right) + 32$$

$$\Rightarrow \underline{392^{\circ}\text{F}}$$