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School of University Polytechnic

Diploma in Electrical Engineering

Mid Term Examination - May 2024

Duration : 90 Minutes

Max Marks : 50

Sem II - N1DF101C - Basic ChemistryGeneral Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Explain co-ordinate bonding with examples. K2 (2)
- 2) Define Hund's Rule of maximum multiplicity. K1 (3)
- 3) Explain the limitations of Valence Bond Theory (VBT). K2 (4)
- 4) Explain de Broglie's hypothesis. K2 (6)
- 5) Identify the observations of gold foil experiment. K3 (6)
- 6) Identify Molecular Orbital Diagram for (Homo-diatomic) Helium (He_2). K3 (9)
- 7) Analyze Valence bond theory (VBT) in detail with suitable examples. K4 (8)
- 8) Simplify the structure of atom by using Bohr's model. K4 (12)

OR

Compare the limitation of VBT & MOT theory. K4 (12)