School of University Polytechnic
Diploma in Civil Engineering
Mid Term Examination - Nov 2023

Duration : 90 Minutes
Max Marks : 50

Sem I - N1DF105C - Basic Chemistry

General 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 Chemical 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'e hypothesis. K2 (6)

5) Identify the observations of gold foil experiment. K3 (6)

6) Identify Molecular Orbital Diagram for (Homo-diatomic) Helium (He2). 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)