

Government General Degree College, Dantan-II
1st Semester B. Sc (General) Internal Examination-2021
Subject: Chemistry **Paper: DSC-1A**
F.M: 20 **Time: 1h**

Answer the following questions (*any ten*)

10×2

1. Write four quantum numbers for valence electron of chromium atom.
2. State postulates of Bohr atomic model.
3. Calculate 2nd Bohr radius for H atom.
4. State Hund's rule. Using this law, calculate the number of unpaired electron of phosphorous.
5. Draw Born-Heber cycle for the formation of NaCl.
6. State Fajan's rule.
7. Dipole moment of NH₃ is greater than NF₃. Explain.
8. Draw resonance structure of nitrobenzene.
9. Formic is more acidic than acetic acid. – Explain.
10. Distinguish between homolytic and heterolytic bond fission.
11. Define enantiomer and diastereomer.
12. Draw R and S configuration of lactic acid.
13. Why meso tartaric acid is optically active?
14. Write short note on Geometrical isomer.
15. Write mechanism for SN¹ reaction.
16. Write mechanism for E¹ reaction.