

Dec 2-12  
(12/12-I)

**5154**

**B. Sc. EXAMINATION**

(First Semester)

**CHEMISTRY**

Third Paper (CH-103)

Organic Chemistry

*Time : Three Hours*

*Maximum Marks : 27*

**Note :** Attempt *Five* questions in all, selecting at least *one* question from each Section.

**Section A**

1. (a) Explain the terms localized and delocalized bonding with suitable examples. 2

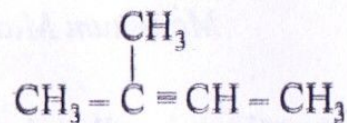
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P.T.O.

(b) Give suitable explanation for the following : 2

- (i) Chloroacetic acid is stronger acid than acetic acid
- (ii) Aliphatic amines are stronger base than ammonia.

(c) Which of the following alkenes is more stable, explain on the basis of hyperconjugation : 1½



2. (a) Justify that :

- (i) Phenols are stronger acids than alcohols
- (ii) Dipole moment of *p*-nitroaniline is higher than that of nitrobenzene. 2

(b) Differentiate between inductive effect and electromeric effect. 2

(c) Draw the structural isomers for the compound of the molecular formula  $\text{C}_3\text{H}_6\text{O}$ . 1½

3. (a) Assign R and S configuration to the following compounds : 2

