

CHEMISTRY-12	Chapter # 09 (Complete) Test: B-2		
	Name:	Class:	ID:
Date: / /	Marks Total: 30	Marks Obtained:	
Time Allowed: 60 Min.			

Maximum Marks: 06 **(OBJECTIVE TYPE)** Time Allowed: 10 Min.

NOTE: Tick The Correct Option:

- Benzene can't undergo:**
 - Substitution reactions
 - Addition reactions
 - Oxidation reaction
 - Elimination reactions
- Which compound is the most reactive one?**
 - Benzene
 - Ethene
 - Ethane
 - Ethyne
- Which one of the following species is an electron withdrawing?**
 - CH₃
 - CHO
 - OH
 - NH₂
- Which one is the correct priority order?**
 - COOH > -NH₂ > -CN
 - CHO > -OH > -COCH₃
 - NH₂ > -OH > -OH
 - COCH₃ > -OH > -NH₂
- All the six unhybrid 2p_z orbitals in benzene overlap to form:**
 - 3 π-bonds
 - 6 π-bonds
 - 3 σ and 3 π-bonds
 - Delocalized π-bonds
- When benzene is treated with methyl chloride in the presence of AlCl₃, the product is:**
 - Chlorobenzene
 - Benzyl chloride
 - Toluene
 - Acetophenon

Maximum Marks: 24 **(SUBJECTIVE TYPE)** Time Allowed: 50 Min.

SECTION-I

Q.2: Give brief answers to the following questions: (16)

- What are polycyclic aromatic hydrocarbons? Give examples.
- How was benzene discovered?
- Define resonance energy. What is the resonance energy of benzene?
- How can benzene be prepared from sodium benzoate and benzenesulphonic acid?
- Write mechanism for sulphonation of benzene.
- What happens when benzene is reacted with ozone?
- Give two reactions of benzene in which it acts an unsaturated compound.
- How will you prepare m-chloronitrobenzene from benzene?

SECTION-II

NOTE: Attempt All Questions:

(08)

Q.3: Explain the structure of benzene on the basis of atomic orbital treatment.

Q.4: Predict the major products of the bromination of:

- (i) Toluene (ii) Nitrobenzene (iii) Bromobenzene (iv) Benzoic acid