

CHEMISTRY-12	Chapter # 09 (Complete) Test: C-2		
	Name:	Class:	ID:
Date: / /	Marks	40	Marks Obtained:
Time Allowed: 75 Min.	Total:		

Maximum Marks: 08 **(OBJECTIVE TYPE)** Time Allowed: 15 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
- The conversion of n-hexane into benzene by heating in the presence of Pt is called:**
 - Isomerization
 - Aromatization
 - Dealkylation
 - Rearrangement
- Molecular formula of benzyl chloride is:**
 - $H_5C_6CCl_3$
 - $H_5C_6CHCl_2$
 - $H_5C_6CH_2Cl$
 - $H_5C_6CH_2CH_2Cl$
- When a hydrogen atom is removed from benzene, the radical is called:**
 - Benzyl group
 - Phenyl group
 - Aryl group
 - Acyl group
- Benzene has regular hexagonal structure. This is supported by the fact(s) that:**
 - Benzene has three disubstituted products.
 - Benzene adds three H_2 molecules in the presence of catalyst.
 - Benzene adds three Cl_2 molecules in the presence of sunlight.
 - All
- Sodium benzoate can be changed into benzene by heating with:**
 - Pt, Pd
 - Zn
 - $Cr_2O_3 + Al_2O_3 + SiO_2$
 - $NaOH + CaO$
- Which compound will be the most difficult to nitrate?**
 - Phenol
 - Toluene
 - Benzaldehyde
 - Chlorobenzene

Maximum Marks: 32 **(SUBJECTIVE TYPE)** Time Allowed: 60 Min.

SECTION-I

- Q.2: Give brief answers to the following questions:** (20)
- What are polycyclic aromatic hydrocarbons? Give examples.

- ii. Give names and isomeric structures of trimethylbenzene.
- iii. What were the objections to Kekule's formula?
- iv. What is Wurtz-Fittig reaction?
- v. Give products and necessary conditions for the reaction of benzene with SO_3 .
- vi. How acetophenone can be prepared from benzene?
- vii. What happens when benzene is burnt in free supply of oxygen?
- viii. How is benzene converted into maleic acid?
- ix. Give two reactions of benzene in which it acts an unsaturated compound.
- x. How will you prepare 2,4,6-Trinitrotoluene from benzene in two steps?

SECTION-II

NOTE: Attempt All Questions:

(12)

Q.3: What is resonance? Explain the structure of benzene on the basis of resonance.

Q.4: What are Friedal-Crafts reactions? Explain the mechanism of Friedal-Crafts alkylolation and acylation.

Q.5: Predict the major products of the bromination of:

(i) Nitrobenzene (ii) Benzaldehyde (iii) Bromobenzene (iv) Phenol