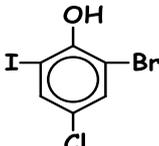


CHEMISTRY-12	Chapter # 09 (Complete) Test: C-1		
	Name:	Class:	ID:
Date: / /	Marks Total: 40	Marks Obtained:	
Time Allowed: 75 Min.			

Maximum Marks: 08 **(OBJECTIVE TYPE)** Time Allowed: 15 Min.

NOTE: Tick The Correct Option:

- The benzene molecule contains:
 - Three double bonds
 - Two double bonds
 - One double bond
 - Delocalized π - electron charge
- The electrophile in aromatic sulphonation is:
 - H_2SO_4
 - HSO_4^-
 - SO_3
 - SO_3^+
- The C-C bond length in benzene is:
 - 1.34 Å
 - 1.20 Å
 - 1.39 Å
 - 1.54 Å
- Which one of the following species is an electron withdrawing?
 - CH₃
 - CHO
 - OH
 - NH₂
- The correct name of the compound  is:
 - 2-Iodo-4-chloro-6-bromophenol
 - 6-Bromo-4-chloro-2-iodophenol
 - 2-Bromo-4-chloro-6-iodophenol
 - 6-Iodo-4-chloro-2-bromophenol
- The heat of hydrogenation of 1,3-Cyclohexadiene is:
 - 119.5 kJ mol⁻¹
 - 208 kJ mol⁻¹
 - 231.5 kJ mol⁻¹
 - 239 kJ mol⁻¹
- Benzene can be oxidized by:
 - KMnO₄
 - K₂Cr₂O₇
 - V₂O₅
 - All
- When chlorobenzene is nitrated in the presence of HNO₃ + H₂SO₄, the main product is:
 - o-Chloronitrobenzene
 - m-Chloronitrobenzene
 - p-Chloronitrobenzene
 - Both 'a' & 'c'

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

SECTION-I

Q.2: Give brief answers to the following questions: (20)

- What are monocyclic aromatic hydrocarbons? Give examples.
- Define phenyl and aryl groups.
- How will you prove that benzene has regular hexagonal cyclic structure?
- Define resonance. Give resonance structures of benzene proposed by Kekule and Dewar.
- How can benzene and toluene be prepared from n-hexane and n-heptane?

- vi. How will you convert phenol into benzene?
- vii. Write down the mechanism for halogenation of benzene.
- viii. What happens when benzene is reacted with ozone?
- ix. What are ortho and para-directing groups?
- x. Why is benzene less reactive than alkenes although it has three double bonds?

SECTION-II

NOTE: Attempt All Questions:

(12)

- Q.3: Draw structural formulas for the following compounds: (i) m-Chlorobenzoic acid (ii) 2,4,6-Trinitrotoluene (iii) p-Dibenzylbenzene (iv) p-Nitroaniline.
- Q.4: Discuss extraordinary stability of benzene molecule.
- Q.5: Detail out reactions in which benzene acts as saturated hydrocarbon and two reactions in which it behaves as unsaturated.