



Shree H.N.Shukla College of Science

B.Sc.(Sem-II)(Chemistry)(CBCS)

Paper 201: Chemistry

Unit-4 (Ch-6) Aromatic Hydrocarbons

Unit test-2

Date: 26/05/21

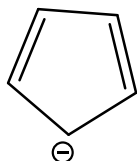
Time: 1.5 hour

[Total- 30 mark]

Q-1(A) Answer the following Questions

[10]

- (1) Define Aromaticity
- (2) What is sigma complex?
- (3) Give the structure of cyclopropyl anions and their aromatic characters.
- (4) Cyclopropyl cation aromatic or non aromatic?
- (5) Given below structure aromatic or antiaromatic?



- (6) Cycloheptyl anion aromatic, non aromatic or anti aromatic?
- (7) Give the two examples of activating groups.
- (8) Give the two examples of deactivating groups.
- (9) Which electrophile produced in Sulphonation of Benzene?
- (10) Which types of substitution reaction of Benzene?

(B) Answer any two of the following Questions

[4]

- (1) Give Criteria for aromaticity
- (2) What are effect of the substitution on the reactivity?
- (3) Naphthalene is aromatic but [10] Annulene is not aromatic explain.
- (4) Discuss the nitration reaction with mechanism.

(C) Answer any two of the following Questions

[6]

- (1) Explain Huckel rule to simple annulene.
- (2) Discuss the unusual behavior of halogen toward aromatic electrophilic substitution reaction?
- (3) Explain Friedel craft acylation reaction with mechanism
- (4) Give the halogenation reaction of Toluene

(D) Answer any one of the following Questions

[10]

- (1) Give the general mechanism of electrophilic aromatic substitution.
- (2) Discuss cyclopentadienyl(cation and anion) and their aromaticity.
- (3) Explain friedel craft acylation reaction with mechanism and discuss its limitations.
- (4) Discuss electronic explanation for ortho and para directive influence with example.