

Assignment
CHE-201
Sem III 2017
Unit Test I

UNIT I (A) Carbohydrates

Long Question:

- (1) What is called Carbohydrates ? Give its classification with suitable example.
- (2) Discuss chemical reactions of Monosaccharides.
- (3) Discuss Emil- Fischer reaction.
- (4) Discuss step – up reaction.
- (5) Discuss step – down reaction.
- (6) Explain : Mutarotation.
- (7) Explain : Epimerization.

Short questions:

- (1) Write uses of Carbohydrates.
- (2) Define ; Anomers
- (3) Which test is used to detect Carbohydrates ?
- (4) What is Fehling A & B solutions ?
- (5) Which substances are removed during Ozone Formation ?

UNIT II (A) Electrophilic Aromatic Substitution

Long Question:

- (1) Explain of sulphonation of benzene with reaction mechanism.
- (2) Explain of halogenations of benzene with reaction mechanism.
- (3) Explain of alkylation of benzene with reaction mechanism.
- (4) Explain of acylation of benzene with reaction mechanism.
- (5) In which position electrophilic substitution reaction take place in phenol? Explain with the help of stability of σ -complexes.
- (6) In which position electrophilic substitution reaction take place in Toluene? Explain with the help of stability of σ -complexes.
- (7) In which position electrophilic substitution reaction take place in Nitro benzene? Explain with the help of stability of σ -complexes. **OR** Nitro benzene on more nitration gives m-di nitro benzene- Explain its resonance effect.

Short Questions:

- (1) Which is the electrophile in nitration of benzene?
- (2) Complete the following reaction:
p-methyl acetanilide with Br_2 and FeBr_3
- (3) Write two examples of deactivating o/p-directing groups.
- (4) Separate o-p directing group from the following:
 $-\text{OH}$, $-\text{OCH}_3$, $-\text{COOR}$, $-\text{NO}_2$, $-\text{Br}$, $-\text{CH}_3$
- (5) Separate deactivating group from $-\text{OH}$, $-\text{CHO}$, $-\text{NO}_2$, $-\text{Cl}$ and $-\text{CH}_3$

Unit III

Long Question:

Unit IV

Long Question:

(1) Write resonance structures of following substance

(i) Acetophenolate ion (ii) Anilene

(2) Write Laurie- Bronsted Acid-Base Principal

Short questions:

Write Lewis Acid-Base principal