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DDJ-202-T

Seat No. _____

Master of Pharmacy Management
(Sem. II) Examination

September – 2022

BP-202-T : Pharmaceutical Organic Chemistry-I

Time : **3** Hours] [Total Marks : **75**

1 Answer the following questions : **20**

(1) Define and classify different types of isomers.

(2) Define and classify different types of hybridization of carbon.

(3) What is Grignard reagent ? Write its method of preparation.

(4) Explain Saytzeff rule with example.

(5) Write any two qualitative identification tests for alcohol.

(6) Write reaction involved in Benzoin condensation.

(7) What is Grignard reagent ? Write its method of preparation.

(8) Bromination of alkane is more selective than chlorination. Why ?

(9) Conjugated diene is more stable than isolated diene. Why ?

(10) Ethylene diamine is less basic than ammonia. Why ?

2 Answer the following questions : (any **two**) **20**

(1) Explain SN_1 and SN_2 reaction, mechanism and stereochemistry of Alkyl halide.

(2) Define hybridization. Explain hybridization of carbon in alkanes and alkene.

(3) Write reaction, mechanism and application of following reaction.

- Aldol and crossed aldol condensation
- Cannizaro and crossed Cannizaro reaction
- Perkin condensation

3 Answer the following question : (any **seven**) **35**

(1) Write a note on structural isomerism in organic compound.

(2) Explain Markownikoff's rule and anti Markownikoff's rule with example.

(3) Explain effect of substituent on Acidity of carboxylic acids with suitable example.

(4) Explain qualitative identification test and laboratory methods for preparation of alcohol.

(5) Explain E2 versus E1 reactions in alkene.

(6) What is conjugated diene. Explain its stability and reactions.

(7) Give structure and uses of following compounds :

(a) Amphetamine

(b) Propylene glycol

(c) Chloral hydrate

(d) Ethylenediamine

(e) Tartaric acid

(8) Explain any two methods for preparation of aldehyde and ketone.

(9) Explain any two methods of synthesis and qualitative identification tests for aliphatic amine.

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