

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: B.PHARM
BRANCH: PHARMACY

SEMESTER : II
SESSION : SP/18

SUBJECT: BP2003 PHARMACEUTICAL ORGANIC CHEMISTRY

TIME: 3 HOURS

FULL MARKS: 60

INSTRUCTIONS:

1. The question paper contains 7 questions each of 12 marks and total 84 marks.
 2. Candidates may attempt any 5 questions maximum of 60 marks.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) Give the structure and IUPAC nomenclature of i) Allyl Alcohol ii) Isobutane [4]
Q.1(b) Differentiate between the following isomerism i) Position Isomerism and functional Isomerism [4+4]
ii) Metamerism and Tautomerism
- Q.2(a) Explain Sp³ Hybridization and Sp² Hybridization [2]
Q.2(b) What are Markonikoff's and AntiMarkonikoff's orientation? [4]
Q.2(c) Differentiate between E1 and E2 reactions. [6]
- Q.3(a) Differentiate between electrophilic and nucleophilic substitutions. [2]
Q.3(b) What are the factors affecting SN1 and SN2 reactions? [4]
Q.3(c) Give structure and uses of i) Ethyl chloride ii) trichloroethylene iii) Iodoform [6]
- Q.4(a) Give the qualitative test for alcohol. [2]
Q.4(b) Give a method of preparation of alcohol. [4]
Q.4(c) Give structure and uses of i) Ethyl alcohol ii) benzyl alcohol iii) Glycerol [6]
- Q.5(a) Differentiate between Aldol Condensation and Cross Aldol Condensation. [4]
Q.5(b) Write a note on Nucleophilic Addition. [8]
- Q.6(a) How do you compare acidity of different carboxylic acids? [2]
Q.6(b) What is Inductive Effect? Give examples. [4]
Q.6(c) Give structure and uses of i) Ethanol amine ii) citric acid iii) Amphetamine [6]
- Q.7 Write short notes on i) Conjugated dienes ii) Amines ii) Carbocations [3+3+6]

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