

Question Paper

Exam Date & Time: 04-Jun-2024 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER BSc. HEALTH SCIENCES DEGREE EXAMINATION - JUNE 2024

SUBJECT: BHS-201 - ORGANIC CHEMISTRY I

(OLD SCHEME - SPECIAL EXAM)

Marks: 75

Duration: 180 mins.

2. Answers ALL questions.

- 2A) Explain the formation of ionic bond with an example. (2)
- 2B) Give the any two differences between inductive and electromeric effect. (2)
- 2C) How do you prepare methane by decarboxylation method? (2)
- 2D) Explain the stability of carbocation. (2)
- 2E) Explain the oxidation reactions of primary and secondary alcohol. (2)
- 2F) Explain SN2 reaction with an example. (2)
- 2G) Why is pyrrole an aromatic compound? (2)
- 2H) What are deactivating groups? Give examples. (2)
- 2I) How is ethyl alcohol prepared from ethylene? (2)
- 2J) Explain the oxidation reaction of 2-hydroxypropane with $K_2Cr_2O_7$. (2)
- 2K) Describe the alkylation of acetylene and terminal alkynes (2)
- 2L) How propene can be prepared by elimination reaction from dehydrohalogenation of simple alkyl halide? (2)
- 2M) Differentiate between enantiomers and diastereomers with suitable example (2)
- 2N) Write the structure and common names of four cyclic ethers. Mention three uses of simple ethers(2)

3. Answer ALL questions.

- 3A) How is methanol prepared? Mention its uses. (3)
- 3B) Why is aniline more reactive than benzene during nucleophilic substitution reaction. (3)
- 3C) Discuss the functional group isomerism of propanal and propanone (3)
- 3D) Discuss the two different approaches for the synthesis of Mustard gas (3)

4. Answer ALL questions.

- 4A) What are the criteria for aromatic compounds? Explain the Lucas test to distinguish alcohols. (5)
- 4B) Explain the structure and bonding in ethene molecule (5)

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