

02/01/24

Seat Number

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DAGDU-13

BP 301T : Pharmaceutical Organic Chemistry-II
(723301)

Total Pages : 2]

Time: 3 Hours

Max. Marks : 75

Instruction to Candidates:

- Do not write anything on question paper except Seat No.
- All questions are compulsory.
- Figures to right indicate full marks.
- Students should note, no supplement will be provided.
- Graph or diagram should be drawn with the black ink pen or black HB pencil.

1. Multiple Choice Questions**10**

- The degree of unsaturation of lipids can be measured as
 - Reichert Meissl value
 - Saponification value
 - Iodine value
 - Polenske value
- What is the general formula of cycloalkane
 - C_nH_{2n}
 - C_nH_{2n+2}
 - C_nH_{2n-2}
 - None of these
- All carbon atoms in naphthalene are.....
 - sp hybridized
 - sp^2 hybridized
 - sp^3 hybridized
 - None of these
- Aromatic hydrocarbons are also called
 - Hukel's compounds
 - Arenes
 - Alkoxy Compounds
 - Trienes
- Phenol is acidic because of
 - Resonance
 - Electromeric effect
 - Inductive effect
 - Peroxide effect
- Anthracene is a polycyclic aromatic hydrocarbon composed of three fused rings
 - Ethylene
 - Alkane
 - Pyridine
 - Benzene
- Fatty acids are.....
 - Unsaturated dicarboxylic acids
 - Long-chain alkanolic acids
 - Aromatic carboxylic acids
 - Aromatic dicarboxylic acids

- 8 Saccharine is used as.....
- Preservative
 - Artificial sweetener
 - Flavoring agent
 - Colouring agent
- 9 According to Baeyer strain theory, which of the following cycloalkanes is stable
- Cyclopropane
 - Cyclobutane
 - Cyclopentane
 - Cyclohexane
- 10 Anthracene undergoes electrophilic substitution reactions mainly at.....
- C-1
 - C-9
 - C-2
 - C-4

B. Write the answer to the following

10

- Define fat and oil.
- Explain, why aromatic acids exhibit an acidic nature
- Give synthetic uses of aryl diazonium salts
- Draw the structure of resorcinol
- Give the medicinal uses Triphenylmethane

2. Solve any two out of three.

20

- Explain in detail the nitration and halogenation reaction of benzene.
- Give the methods of preparation and reaction of Anthracene
- Explain the concept of acidity of phenol
 - Write chemical reactions of phenol

3. Solve any seven out of nine

35

- Give the synthesis and chemical reaction of Naphthalene
- Explain the concept of the basicity of aromatic amine
- Define Cycloalkane, explain Coulson & Moffitt's modification theory
- Write a detailed note on Friedel-Crafts alkylation
- Draw the structure of Diphenylmethane, Phenanthrene, and Anthracene, and give medicinal uses for any one of them
- Write note on:
 - Saponification value
 - Ester value
- Write a note on the effect of substituents on reactivity and orientation of mono-substituted benzene.
- Draw the structure of DDT, Saccharin, and BHC and give uses of DDT
- Explain Huckel's rule for aromaticity