Total No. of Questions: 3 *Total No. of Printed Pages:2*

Enrollment No.....

Faculty of Pharmacy

End Sem (Odd) Examination Dec-2022

PY3CO09 Pharmaceutical Organic Chemistry-II

Programme: B. Pharm. Branch/Specialisation: Pharmacy

Duration: 3 Hrs. **Maximum Marks: 75**

Note: All questions are compulsory. Internal choices, if any, are indicated.

Q.1	i.	Write down the structure and uses of DDT and BHC.	**2**
	ii.	Define electrophile with examples.	**2**
	iii.	Write down the uses of resorcinol and naphthol.	**2**
	iv.	What are aromatic amines.	**2**
	v.	What is saponification value.	**2**
	vi.	Define iodine value.	**2**
	vii.	Write down structure and medicinal uses of naphthalene.	**2**
	viii.	Enlist polynuclear hydrocarbons and also draw their structures.	**2**
	ix.	What are the limitations of Baeyer's strain theory.	**2**
	x.	Write down the different theories associated with stabilities of cycloalkanes.	**2**
Q.2		Attempt any two:	
	i.	Explain aromatic electrophilic substitution reactions in benzene with respect to halogenations and Friedel craft acylation with mechanism.	**10**
	ii.	Give synthesis and reactions of phenols. Discuss effect of substituents on acidity of phenols.	**10**
	iii.	(a) Explain resonance, aromaticity and Huckel's rule in benzene.	**5**
		(b) Why aniline weaker base than ammonia? Explain the effect of substituent on basicity of aromatic amines.	**5**
Q.3		Attempt any seven: Two questions from each section is compulsory.	
		Section - A	
	i.	Discuss the hydrolysis, rancidity and drying of oils with suitable example.	**5**

	ii.	What do you mean by analytical constants? Write principle and procedure involved in the determination of saponification value.	**5**
	iii.	Write principle and procedure involved in the determination of acid value.	**5**
		Section - B	
	iv.	Give synthesis, reactions and uses of anthracene.	**5**
	v.	Write down preparation and reactions of diphenylmethane.	**5**
	vi.	Give structures, reactions and uses of naphthalene.	**5**
		Section - C	
	vii.	Explain Baeyer strain theory of stability of cycloalkanes and give its limitations.	**5**
	viii.	Explain Sachse-Mohr theory of stability of cycloalkanes	**5**
	ix.	Write down significance and principle involved in Reichert Meissl Value.	**5**

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Scheme of Marking

Faculty of Pharmacy

End Sem (Odd) Examination Dec-2022

PY3CO09 Pharmaceutical Organic Chemistry-II

Programme: B. Pharma | Branch/Specialisation:

Duration: 3 Hrs. **Maximum Marks: 75**

Note: The Paper Setter should provide the answer wise splitting of the marks in the scheme below.

Q.1	i)	Write down the Structure and uses of DDT and BHC. 1Marks Each	**2**
	ii)	Define electrophile with examples.	**2**
	iii)	Write down the uses of resorcinol and naphthol. 1Marks Each	**2**
	iv)	What are aromatic amines.	**2**
	v)	What is saponification value.	**2**
	vi)	Define Iodine Value.	**2**
	vii)	Write down Structure and medicinal uses of naphthalene. 1Marks Each	**2**
	viii)	Enlist Polynuclear hydrocarbons and also draw their structures. 1Marks Each	**2**
	ix)	What are the limitations of Baeyer's strain theory.	**2**
	x)	Write down the different theories associated with stabilities of cycloalkanes.	**2**
Q.2		Attempt any two:	
	i.	aromatic electrophilic substitution reactions 4 Marks halogenations 3 Marks Friedel craft acylation with mechanism. 3 Marks	**10**
	ii.	Synthesis 3 Marks reactions of Phenols 3 marks Discuss effect of substituents on acidity of phenols. 4 Marks	**10**
	iii.	(a) Explain resonance, aromaticity and Huckel's rule in benzene. 1.5+1.5+2	**5**
		(b) Why aniline weaker base than ammonia? Explain the effect of substituent on basicity of aromatic amines. 2+3	**5**
Q.3		Attempt any seven: Two questions from each section is compulsory.	
		Section - A	
	i.	Discuss the hydrolysis, rancidity and drying of oils with suitable example. 1.5+1.5+2	**5**
	ii.	What do you mean by analytical constants? Write principle and procedure involved in the determination of Saponification value. 2+3	**5**
	iii.	Write principle and procedure involved in the determination of acid value. 2+3	**5**
		Section - B	
	iv.	Give synthesis, reactions and uses of Anthracene. 2+2+1	**5**
	v.	Write down Preparation and reactions of Diphenylmethene. 2.5+2.5	**5**
	vi.	Give structures, reactions and uses of Naphthalene. 1+2+2	**5**
		Section - C	
	vii.	Explain Baeyer strain theory of stability of Cycloalkanes and give its limitations. 3+2	**5**
	viii.	Explain Sachse-Mohr theory of stability of cycloalkanes	**5**
	ix.	Write down significance and principle involved in Reichert Meissl Value. 2+3	**5**

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