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Total No. of Printed Pages: 2



Enrollment No.....

Faculty of Pharmacy

End Sem Examination Dec 2024

PY3CO09 Pharmaceutical Organic Chemistry -II

Programme: B. Pharma Branch/Specialisation: Pharmacy

Duration: 3 Hrs.

Maximum Marks: 75

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

	Marks	BL	PO	CO	PSO
Q.1 i.	2	1	1	1	
ii.	2	1	1	1	
iii.	2	1	1	1	
iv.	2	1	1	1	
v.	2	2	2	1	
vi.	2	1	2	1	
vii.	2	2	3	1	
viii.	2	1	3	1	
ix.	2	2	4	1	
x.	2	2	4	1	
Q.2 i.	10	2	1	1	
ii.	10	2	1	1	
iii. (a)	5	1	1	1	
iii. (b)	5	1	1	1	

[2]

Q.3 Attempt any seven: Two questions from each section is compulsory.

Section - A

- i. Write a note on the determination of acid value in fats and oils. **5** 2 2 1
- ii. Explain the hydrolysis and hydrogenation reactions of fatty acids. **5** 2 2 1
- iii. Write a note on the types of rancidity and the methods for prevention of rancidity. **5** 2 2 1

Section - B

- iv. Explain the Haworth synthesis for naphthalene? **5** 2 3 1
- v. Explain any two methods for the synthesis of phenanthrene. **5** 2 3 1
- vi. Write any five reactions of anthracene. **5** 2 3 1

Section - C

- vii. Write a note on Bayer's strain theory. **5** 2 4 1
- viii. Describe about Coulson and Moffitt's modification. **5** 2 4 1
- ix. What is Sachse Mohr theory of strainless rings? **5** 2 4 1

Marking Scheme

PY3CO09 Pharmaceutical Organic Chemistry-II

Q.1	i) Why benzene is an aromatic compound?	2
	Reason	2 mark
	ii) Draw structure and uses of DDT	0.5 mark
		0.5mark
	And Draw structure and uses BHC	0.5 mark
		0.5 mark
	iii) Give structure and use of aryl diazonium salt	1 mark
		1 mark
	iv) Write any two qualitative tests for Phenol.	Each 1 mark
		2
Q.2	v) What is saponification reaction of fats and oils?	2
	vi) Explain the principle of iodine value.	2
	vii) Classify polynuclear hydrocarbons?	2
	viii) Give structure and Any two uses of Diphenylmethane.	1 mark
		1 mark
	ix) Write any two reactions of cyclobutene.	Each 1 mark
		2
	x) What is the stability order of cycloalkanes?	2
Q.3	Attempt any two:	
	i. Discuss the reaction mechanism of nitration and sulphonation of benzene in detail.	5 marks
		5 marks
	ii. Define Acidity	2 marks
	Effect of substituents on acidity on benzoic acid and important reactions of Benzoic acid.	5 marks
		3 marks
	iii. (a) Discuss halogenation reaction or Friedel crafts alkylation- reaction of benzene in detail.	5
	(b) Define Basicity and effect of substituents on basicity of amines in detail.	5
	Basicity	2 marks
	Effect	3 marks
Q.4	Attempt any seven: Two questions from each section is compulsory.	

Section - A		
i.	Write a note on the determination of acid value in fats and oils. Principle	2 marks
	Procedure	2 marks
	Formula	1 mark
ii.	Explain the Hydrolysis and Hydrogenation reactions of fatty acids.	2.5 marks
iii.	Write a note on the 3 types of rancidity the methods for prevention of rancidity.	Each 1 mark
		2 marks
	Section - B	
iv.	Explain the Haworth synthesis for Naphthalene?	5
	Structures and reaction	2.5 marks
	Explanation	2.5 marks
v.	What are the methods used for the synthesis of phenanthrene. Any 2 methods of synthesis	5
vi.	Write any five reactions of anthracene.	Each 1 mark
	Section - C	
vii.	Write a note on Bayer's strain theory.	5
viii.	Describe about Coulson and Moffitt's modification.	5
ix.	What is Sachse Mohr theory of Strainless rings?	5

Q.3 Attempt any seven: Two questions from each section is compulsory.