## **Question Paper**

Exam Date & Time: 10-Jun-2019 (09:30 AM - 12:30 PM)





## MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm - Semester -IV End Semester Examination, JUNE- 2019

Course Code: PCH-BP401T
Course Title: PHARMACEUTICAL ORGANIC CHEMISTRY-III (THEORY)
Date: 10 June 2019

	Date. 10 June 2019	
	Pharmaceutical Organic Chemistry-III [PCH-BP401T]	
Marks: 75		Duration: 180 mins
	I Multiple Choice Questions (MCQs)	
	he questions.	Section Duration: 30 min
instructions:	Answer ALL questions.  Seven membered ring with one nitrogen is called	(1)
7	Seven membered mig with one mitogen is called	(±)
	Azepines	
	thiazines	
	diazine	
	oxapines	
2)	Quinoxaline is	(1)
	Benzo pyridine	
	Benzo pyrimidine	
	Benzo pyrazine	
	Benzo pyridazine	
3)	is more aromatic than pyrrole	(1)
	pyridine	
	thiophen	
	furan	
	pyrazole	
4)	Example for diazole	(1)
7)	Example for diazoic	(*)
	_oxazole_	
	thiazole	
	isoxazole	
	imidazole	
		40
5)	Atropisomerism	(1)
	stereochemistry of bi phenyls	
	stereochemistry of E1 reactions	
	stereochemistry of E2 reactions	
	stereochemistry of SN1	

48	reactions	
)	Imidazolidine 2,4 dione is also called as	(1)
	Perhital	
	Barbital	
	hydantoin	
	diazepines	
	azepines	(4)
)	Metronidazole hasnuclues	(1)
	imidazole	
	pyridine	
	quinoxaline	
	pyrazole	
)	Cycloserine is used in the treatment of	(1)
,		
	malaria	
	cancer	
	amoebiasis	
	tuberculosis	
)	Isoquinoline upon reduction with Sn/HCI gives	(1)
	<u>Decahydroisoquinoline</u>	
	1,2,3,4-tetrahydroisoquinoline	
	<u>Isoqinoxaline</u>	
	Pyridine 3,4-dicarboxylic acid	
0)	Reserpine is a/anderivative	(1)
	<u>imidazole</u>	10
	indole	
	pyridine	
	pyrrole	
1)	Isoquinoline is synthesized by the reaction of hydroxylamine with	(1)
1)	130quillolline 13 Synthesized by the readdon of hydroxylamine with	(2)
	<u>acetaldehyde</u>	
	<u>formaldehyde</u>	
	<u>cinnamaldehyde</u>	
	<u>benzaldehyde</u>	
2)	Purine is prepared by	(1)
	Albert and Brown's synthesis	
	Skraup synthesis	
	Friedlander synthesis	
	Lipp synthesis	
3)	Reduction of quinoline using H <sub>2</sub> / Platinum gives	(1)
- VI		

1,2-dihydroquinoline			
<u>isoquinoline</u>			
decahydroquinoline			
1,2,3,4-tetrahydroquinoline			
Benzylidene acetone is prepared by			(1
Dakin's reaction			
Claisen-Schmidt reaction			
Birch reduction			
Metal hydride reduction			
A meso compound is the one whose molecules are			(1)
Non superimposable on their mirror images			
optically active			
superimposable on their mirror images			
levorotatory			
The carbonyl group of ketones upon reaction with their a converted togroup	zines in the presence	of a base gets	(1)
_methyl_			
methylene			
carboxyl			
ester			
n-butylphenylketone is converted to n-pentylbenzene by			(1)
Wolf-Kishner reduction			
<u>Clemmenson</u> <u>reduction</u>			
Oppenauer oxidation	è		
Birch reduction			
Coramine contains nucleus			(1)
Pyrimidine			
isoquinoline	4		
acridine			
pyridine			
Chloroquine is used in the treatment of			(1)
amoebic liver abscess			
spasms of ureter			
pneumonia			
<u>cerebral</u> haemorrhage			

(1)

15)

.6)

7)

Acriflavin is alan

flavanol
flavanone
topical antiseptic
antibiotic

## II Long Answers

Answer all the	questions.	
1)	Explain the electrophilic substitution reactions of indole with examples. Give the structure of isoniazid, primaquine, sulphapyridine, acriflavin and caffeine.	(10)
2)	Give the structure and uses of Frusemide and nitrofuroxime. Write one method of synthesis of furan and discuss the electrophilic reactions of furan with an example.	(10)
	III Short Answers	
Answer all the	questions.	
1)	Give the structure and uses of chloroquine and papaverine	(5)
2)	What is Birch reduction? Explain	(5)
3)	What are meso compounds? Explain with examples.	(5)
4)	What is racemic modification? Explain the methods of resolution of racemic mixture.	(5)
5)	Discuss stereospecific reactions with an example	(5)
6)	Explain the stereochemistry of biphenyl compounds	(5)
7)	Discuss the aromaticity of furan pyrrole and thiophen	(5)

----End----