9/02/22

Total No. of printed pages = 3

BINA CHOWDHURY CENTRAL LIBRARY (GIMT & GIPS) Azara, Hatkhowapara Guwahati – 781017

## PY 132705

			-	-	
Roll No. of candidate					

2021

B.Pharm. 7<sup>th</sup> Semester (Repeaters) End-Term Examination Pharmacy

## PHARMACEUTICAL CHEMISTRY - VII (MEDICINAL CHEMISTRY - III) (Old Regulation)

Full Marks - 100

Time - Three hours

The figures in the margin indicate full marks for the questions.

Answer question No. 1 and any six from the rest.

1. Multiple Choice questions:

 $(10 \times 1 = 10)$ 

- (i) Which of the following is antimalarial drug?
  - (a) Tinidazole
  - (b) Chloroquine
  - (c) Isoniazide
  - (d) All of the above
- (ii) Greseofulvin is
  - (a) Antiviral drug
  - (b) Antifungal drug
  - (c) Antileimanial drug
  - (d) None of the above
- (iii) The following is an acid resistant penicillin
  - (a) Penicillin-V
  - (b) Methicillin
  - (c) Amphicillin
  - (d) Pecillin G

[Turn over

		FRANCISCO NUMBER OF AMIR
(iv)	Meb	pendazole is used as
	(a)	Antifungal
	(p)	Anthelmintic
	(c)	Antiviral
	(d)	None of the above
(v)	Whi	ich of the following will be a pharmaceutical application of prodrugs?
	(a)	Enhancement of bioavailability
*	(b)	Reduction of toxicity
	(c)	Improvement of odour
	(d)	Site-specific drug delivery
(vi)	Wh	at are xenobiotics?
	(a)	Another form of antibiotics
	(b)	A form of nutrient
	(c)	Nutrients which kill the gut harmful microbes
*	(d)	Anything that is not nutrients and enters the body through different routes
(vii	) Foll	lowing are the Phase I reactions except ————
	(a)	Oxidative reactions
	(b)	Hydrolytic reactions
	(c)	Reductive reactions
*	(d)	Sulphide reactions
(vii	i) Alk	ylating agents exert cytotoxic action by inducing:
	(a)	Breakage of DNA strand
	(b)	Cross linking of DNA strands
	(c)	Abnormal pairing of purine and pyrimidine bases
	(d)	All of the above
(ix)	The	e most important target of action of chlorambucil is:
	(a)	Myeloid tissue
8	(b)	Lymphoid tissue
	(c)	Neural tissue
	(d)	Skin

- (x) Zidovudine is used as
  - (a) Antimalarial drug
  - (b) Antibacterial drug
  - (c) Antifungal drug
  - (d) Antiviral drug
- 2. Define anabolism and catabolism. Explain different functionalization reaction of metabolism. (5+10=15)
- 3. Classify prodrug citing example of each category with structure and write down its pharmaceutical application. (10+5=15)
- 4. Explain the Structure activity relationship of sulphonamides. Write down the synthesis of sulphamethoxazole, sulphadiazine and sulphacetamide. (6+9=15)
- 5. Write a note on broad spectrum antibiotics and beta lactam antibiotics with example. (7.5+7.5=15)
- 6. Classify antiprotozoal agents. Write down the mode of action and synthesis of Chloroquine and Primaquine. (3+6+6=15)
- 7. Write down the synthesis of the following drugs:

 $(3 \times 5 = 15)$ 

- (a) Ketoconazole
- (b) Isoniazide
- (c) Metronidazole
- 8. Define the term anthelmintics. Write down the mode of action and synthesis of Mebendazole and Niclosamide. (2+6+7=15)
- 9. Classify antineoplastic agent citing example. Explain the SAR of any two category of antineoplastic drug. (5+10=15)
- 10. Explain in details about thyroid and antithyroid drugs citing example with structure. (15)