Marks: 75

Exam Date & Time: 06-Jun-2022 (10:00 AM - 01:00 PM)



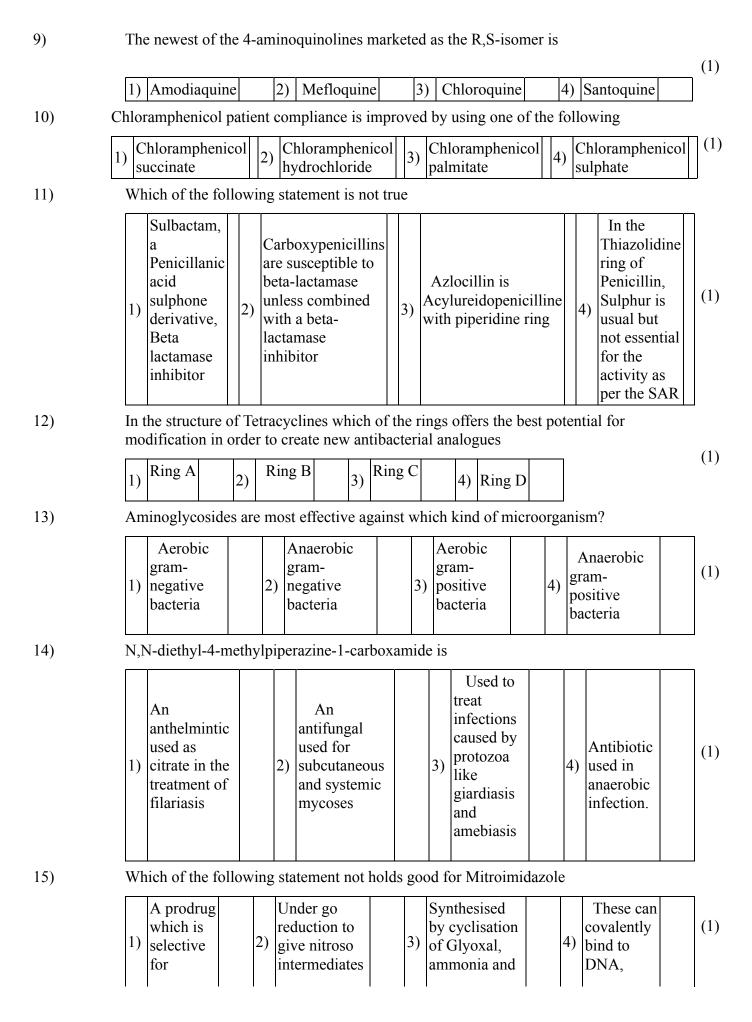
## **MANIPAL ACADEMY OF HIGHER EDUCATION**

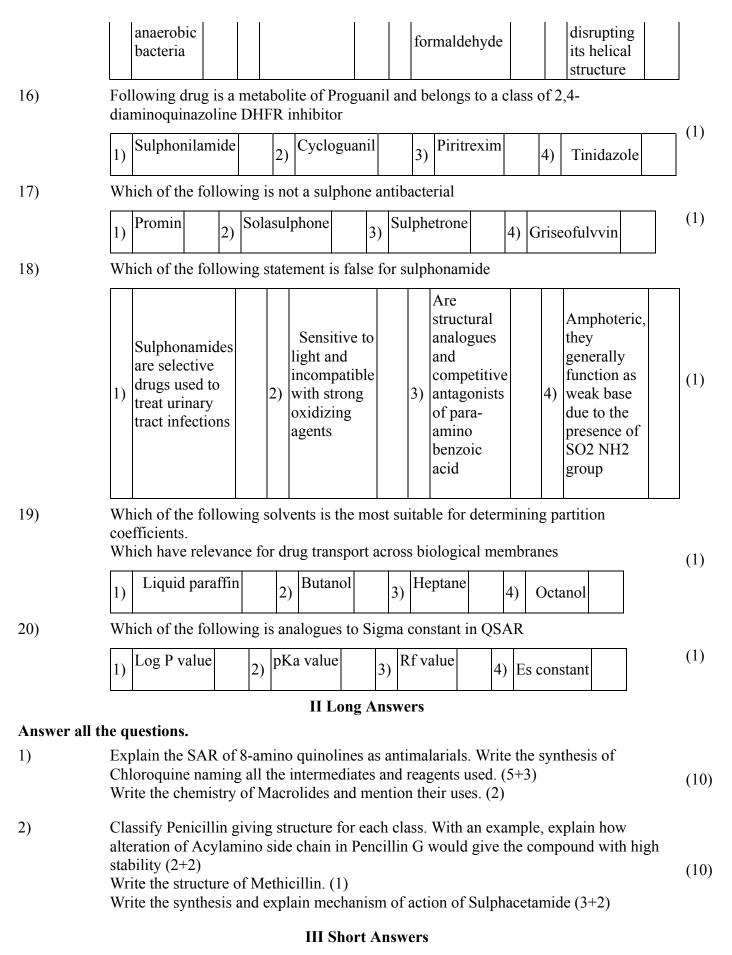
## Medicinal Chemistry III [PCH-BP601T-S1]

**Duration: 180 mins.** 

I Multiple Choice Questions (MCQs)

Answer	all the questions. Section Duration: 30 mins
1)	Which macrolide doesn't inhibit CYP3A4?
	1)Clarithromycin2)Erythromycin3)Azithromycin4)Telithromycin(1)
2)	Chloramphenicol is produced by
	1)Streptomyces erythraeus2)Streptomyces venezuelae3)Mycoplasma pneumonia4)Chlamydia pneumonae.(1)
3)	The artemisinin series are made up of following structures
	1) Dioxanes 2) 3-aryltrioxanes 3) Benzoxanes 4) Tetraoxanes (1)
4)	The replacement of carboxylic group by one of the following group produces a derivative which is 4-10 times potent than ciprofloxacin (1)
	1)Aldehyde2)Isothiazolo3)Thiol4)Diazo
5)	Resistance to fluoro quinolones developes due to
	1)Mutation in DNA gyrase2)Mutation in porin channels3)Mutation in topoisomerase-I4)Mutation in topoisomerase -II(1)
6)	One of the following isomer of Ethambutol is most active
	1)Leavo isomer2)dextro isomer3)Meso isomer4)racemic mixture(1)
7)	Amantadine and rimantadine are approved for prevention and treatment of
	1)influenza type A virus infections2)influenza type B virus infections3)Herpes Simplex virus infections4)Hepatitis A virus infections(1)
8)	3TC is a common name of
	1) Zidovudine 2) Didanosine 3) Lamivudine 4) Ribavirin (1)





## Answer all the questions.

PCH-BP601T-S1

1)	Write the SAR and use of INH. What are scavenger resins and what is their use in solution phase synthesis of Combichem technique.(3+2)	(5)
2)	Classify antivirals and anti-aids agents with one example under each class with its structure How can you prolong the duration of action as well as improve organ sensitivity of drugs.(3+2)	(5)
3)	Write the structure of the following compounds and mention their use: i) Gatifloxacin b) Pyrazinamide c) Primaquine d) Zidovudine e) Choramphenicol.	(5)
4)	What is Hammet constant? Considering Benzoic acid and its derivatives explain the application of Hammet constant in understanding their biological activity.	(5)
5)	How do you classify sulphonamides based on its chemical structure? Give examples (3) Write the structure and uses of Itraconazole. (2)	(5)
6)	Write the general structural features, mechanism of action of aminoglycosides. (3) Enlist four SAR features of Ring A in Tetracycline. (2)	(5)
7)	By giving the general structure, enlist any six points under SAR of Cephalosporin.(3) What are monobactams? Draw the general structure and clinical uses. (2)	(5)

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