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L—285—2019

FACULTY OF SCIENCE

M.Sc. (Second Year) (Fourth Semester) EXAMINATION

MARCH/APRIL, 2019

(CBCS Pattern)

ORGANIC CHEMISTRY

Paper XXIII CH-544/2A

(Medicinal Chemistry—II)

(Tuesday, 30-4-2019)

Time : 2.00 p.m. to 5.00 p.m.

Time—3 Hours

Maximum Marks—75

N.B. :— (i) Attempt All questions.

(ii) Figures to the right indicate full marks.

1. Write the answers of any *three* : 15
 - (a) Discuss about the drugs used to test liver functions.
 - (b) How is Immunology used in the treatment of cancer ?
 - (c) Offer synthesis of primaquine.
 - (d) Discuss SAR and mechanism of action of Biguanides.
 - (e) Give synthesis and uses of Allopurinol.
2. Attempt any *three* of the following : 15
 - (a) Give synthesis and SAR of pentothal sodium.
 - (b) Explain the terms :
 - (i) Sacroma
 - (ii) Metastases.
 - (c) What are antimalarial drugs ? How are they classified ?

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- (d) Give the concept of Anthelmintic agents offer synthesis of Mebendazol.
- (e) What are Antihypertensive drugs ? Give synthesis and structure activity of Methyl dopa.
3. (a) What are antianginal drugs ? Give types of angina pectoris. Explain mechanism of action of antianginal drugs. 8
- Or*
- Discuss SAR of methyl salicylate, mefenamic acid, phenyl butazone and Iodomethazone.
- (b) What are sedatives and hypnotics ? Give SAR of sulphones. 7
- Or*
- Discuss SAR of 8-Aminoquinoline derivatives as antimalarials. Give synthesis of pyrimethamine.
4. (a) Define sweetening agents. Discuss about Saccharin, P-Phenyl urea and Dipieramol. 8
- Or*
- Offer synthesis or procaine, amitriptyline and chlorpromazine.
- (b) Discuss about the use of Hormones and antibiotics as anticancer agents. 7
- Or*
- Discuss SAR of Morphine and Methadone.
5. (A) Select the *correct* alternatives in the following : 5
- (i) The life-cycle of HIV is about days.
- (a) 1.5
- (b) 15
- (c) 20
- (d) 25

- (ii) The terminal nitrogen in should be substituted at two carbon chain.
- (a) Verapamil
 - (b) P-phenyl urea
 - (c) Sulphonyl urea
 - (d) Sodium saccharin
- (iii) Mefenamic acid is the derivative of
- (a) Benzoic acid
 - (b) Salicylic acid
 - (c) Phthalic acid
 - (d) Anthranilic acid
- (iv) Carcinoma arises from cells.
- (a) Ectodermal
 - (b) Mesodermal
 - (c) Endodermal
 - (d) Myocardial
- (v) disease is due to adhesion of platelets to the inner vascular wall of arteries.
- (a) Angina pectoris
 - (b) Arrhythmia
 - (c) Congestive heart failure
 - (d) Thromboembolic disease

(B) Write short notes on any two :

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- (a) Patent application under PCT
- (b) Recent development in the treatment of AIDS
- (c) SAR of Butyrophenone derivatives