

Rajiv Gandhi University of Health Sciences, Karnataka

First Year M. Pharm Degree Examination - NOV 2016

Time: Three Hours Max. Marks: 100 Marks

MEDICINAL CHEMISTRY-II (Natural Products) (Revised Scheme 4)

Q.P. CODE: 9348

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 20 = 40 Marks

- a) Describe in detail the theoretical and practical aspects of microbial conversions.
 - b) Enumerate the different reactions possible by microbial conversions.
- a) Describe the significance of structural features, mechanism of action and classification of
 - a) Cephalosporins b) Other β lactam antibiotics.
 - b) Show how the structure of emetine has been arrived at.

(10+10)

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- 3 a) Describe the physiological role of sex hormones. Write their structures. Describe the SAR and development of anabolic agents for treatment of infertility.
 - b) Classify adrenal cortex hormones; give their therapeutic role. Discuss the structural modifications done to obtain useful medicinal agents. (12+8)

SHORT ESSAYS (Answer any FIVE)

5 x 10 = 50 Marks

- Depict the metabolism of Purines and Pyrimidines.
- 5. Establish the structure of Morphine.
- 6. Discuss the chemistry of vitamin B1 with suitable illustrations.
- Describe the chemistry and development of β –lactamase stable cephalosporins.
- 8. Describe the chemistry of carotenoids and discuss the constitution of Vitamin A.
- Elucidate the structure of Reserpine.

SHORT NOTES 2 x 5 = 10 Marks

- Describe the chemistry and MOA of antiparasitic Purine and Pyrimidine related compounds.
- Discuss the biosynthesis and structure of Vitamin D.
