

## Rajiv Gandhi University of Health Sciences

IV Year B.Pharm Degree Examination - JAN-2019

Time: 3 Hours [Max. marks: 70]

## **Medicinal Chemistry II**

(Revised Scheme – 3) QP Code: 2619

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

## LONG ESSAY (Answer any two)

2 X 10 = 20 Marks

- Classify sulphonamides. Give the SAR and chemistry of sulphonamides. Write the synthesis of sulphamethoxazole
- 2. Classify anti-hypertensive agents with examples and give their mechanism of action. Outline the synthesis of Nitrofurantoin.
- 3. What are anti-malarial agents classify them with examples. Give their mechanism of action and outline the synthesis of pamaguine

## SHORT ESSAY (Answer any six)

6 X 5 = 30 Marks

- 4. Write the synthesis, medicinal uses and mode of action of thiabendazole
- 5. What are anti neo-plastic agents? Discuss hormones as anti-neoplastic agents
- 6. Write a short note on computer aided drug design and combitorial chemistry
- 7. Discuss the chemistry of macrolide antibiotics giving their uses and side effects
- 8. What are calcium channel blockers? Describe their effects on cardiovascular system
- 9. Write a note on carbonic acid anhydrase inhibitors. Give their structure and uses.
- 10. Explain the SAR of tetracylines.
- 11. Write the structure and medicinal uses of any four antiprotozoal drugs.

SHORT ANSWERS 10 X 2 = 20 Marks

- 12. Give the synthesis and medicinal uses of ciprofloxacin
- 13. Give the structure and mechanism of action of lomustine
- 14. Write the structure and uses of any two anti-thyroid drugs.
- 15. What are potassium sparing diuretics? Give the structure of triampterene.
- 16. What are monolactam antibiotics? Give the structure and medicinal uses of aztreonam.
- 17. Give examples of cationic surfactants with their specific uses.
- 18. What is lead molecule? Give examples.
- 19. Give the synthesis of Furazolidone
- 20. Outline the synthesis of warfarin
- 21. Preservatives used in ocular products

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