



**MEDICINAL CHEMISTRY - II (NATURAL PRODUCTS)**

**PAPER IV**

**(RS 2 & RS 3)**

**Q.P. CODE: 9234**

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

**LONG ESSAY (Answer any TWO)**

**2 X 20 = 40 Marks**

1. Elucidate the structure of emetine.
2. Classify semi synthetic penicillins. Give the SAR of  $\beta$ -Lactam antibiotics.
3. a) Classify female sex hormones with suitable examples.  
b) Give the SAR of progesterone.

**SHORT ESSAY (Answer any FIVE)**

**5 X 10 = 50 Marks**

4. a) Give the classification of cardiac-glycosides with their structures.  
b) Discuss the chemical degradation of cardiac glycosides.
5. a) Classify adrenal cortex hormones.  
b) Write the synthesis of cortisone from sermentogenin.
6. Write the synthesis of reserpine.
7. Give five important chemical constituents from a) Salacia reticulata b) Swertia Chirata c) Pterocarpus supium. Mention their medicinal uses.
8. Write the synthesis of any three non-steroidal synthetic oestrogenic hormones. Give their medicinal importance.
9. Give the chemistry of anti parasitic purine and pyrimidines related agents.

**SHORT NOTES**

**2 X 5 = 10 Marks**

10. Anti fungal agents
11. Morphine derivatives and their identification tests.

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