QP CODE:312006	Reg.No:
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Third Year B.Pharm Degree Supplementary Examinations - January 2016

## PHARMACEUTICAL CHEMISTRY IV

(Chemistry of Natural Products)

## (2012 Scheme)

Time: 3 Hours Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay (3x10=30)

- 1. Explain the chemistry, structural elucidation and pharmacological activity of atropine
- 2. Discuss the structure of glucose and explain how will you determine the ring size of glucose
- 3. Discuss the analytical constants of fats and oils. Explain the methods for their determination and its significance

Short notes (14x5=70)

- 4. Synthesis of progesterone from cholesterol
- 5. Isoelectric point and epimerisation
- 6. Explain the secondary structure of protein
- 7. Explain the structure, biological activities and uses of aldosterone
- 8. Chemistry of bile acids
- 9. Essential amino acids with structures
- 10. Explain the chemistry of sapogenins
- 11. Chemistry and uses of ionones
- 12. Structural features of insulin
- 13. Chemistry and uses of geraniol
- 14. Inter relationship of caffeine, theobromine and theophylline
- 15. Skeletal structure and biological activities of thyroxin and triiodothyronine
- 16. Chemical structure and uses of clinically useful prostaglandins
- 17. Explain the synthesis and uses of any two non-steroidal oestrogenic compounds

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