

**III B. Pharmacy I Semester Supplementary Examinations, Oct/Nov - 2020**  
**CHEMISTRY OF NATURAL DRUGS**

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions  
All Questions carry **Equal** Marks

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1. a) Define alkaloids. Explain their isolation, extraction & chemical tests. (8M)  
b) Explain the Structure and uses of Papaverine, Ethaverine & Dioxylone. (7M)
  
2. a) Explain the Structures, hydrolytic products and uses of Ergot alkaloids. (8M)  
b) Write a note on Synthetic derivatives of Ergot alkaloids. (7M)
  
3. a) Write the biological source, synthesis and uses of Carvone. (8M)  
b) Discuss the biological source, structure and uses of Menthol. (7M)
  
4. Explain the following conversions. (15M)  
(a) Reduction of citral to citronellal  
(b) Conversion of Alfa – Terpeniol to p-cymene  
(c) Conversion of menthol into thymol.  
(d) Reduction of camphor to Borneol
  
5. a) Classification, structures, SAR & uses of Steroidal Anti-Inflammatory drugs. (8M)  
b) Explain the Enzymatic and acid hydrolytic reactions of the glycosides. (7M)
  
6. a) Explain the Nomenclature, Stereochemistry and Numbering of steroids. (8M)  
b) Write the Sources & structures Cholesterol, Stigmasterol and Ergosterol. (7M)
  
7. a) Explain about Structures and Inter conversions of Estrogens. (8M)  
b) In detail explain about Marker's synthesis of progesterone. (7M)
  
8. a) Explain the Structure, biological actions, uses of Mineralocorticoids. (7M)  
b) Write the importance of insulin and mention its preparations. (8M)