

Code: 9R01604

B.Pharm III Year II Semester (R09) Supplementary Examinations December 2017

CHEMISTRY OF NATURAL DRUGS

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Define alkaloids. Explain the general principle behind the extraction and isolation of alkaloids from crude drugs.
(b) Give structure and uses of ethaverine and doxycycline.
(c) Discuss SAR of morphine.
- 2 (a) Explain extraction of volatile oil by enfleurage method.
(b) Write a short note on reduction of citral to citronellal and oxidation of citral to geranic acid.
(c) Give source and structure of limonene, pinene and 1, 8 – Terpene.
- 3 Write short notes on:
(a) Oxidation of menthol to menthone.
(b) Reduction of camphor to borneol and isoborneol.
(c) Synthesis of carvone.
- 4 Write a brief note on sources and structure of steroidal drugs like diosgenin, cholesterol and stigmasterol. Also illustrate about the Marker's synthesis of progesterone.
- 5 What are cardiac glycosides? Give the mechanism of action, SAR therapeutic uses and toxicity of cardiac glycosides.
- 6 (a) Write an informative note on hormones of thyroid like thyroxine and triiodothyronine.
(b) Discuss the preparation of progesterone from diosgenin.
- 7 (a) Discuss about structure, biological activity and uses of Fludrocortisone.
(b) What are glucocorticoids? Explain their biological activity and uses.
- 8 (a) Give the chemistry of reserpine, rescinnamine, deserpidine and syrosingopine.
(b) Discuss various synthetic derivatives of ergot alkaloids.
