(2017 Scheme)

Time: 3 Hours

- Answer all questions to the point neatly and legibly Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together

 Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Essays

- 1. Discuss briefly about the various tracer techniques used in investigation of biogenetic pathway studies.
- 2. Give a pharmacognostic account on Cinchona.

Short Notes

- Differentiate Indian Senna and Alexandrian Senna.
- 4. Adulterants of clove.
- 5. Chemical tests for benzoin.
- 6. Explain the microscopical character of ginger with neat labelled diagram.
- 7. Explain the industrial production and utilization of Atropine.
- 8. Principle and applications of HPTLC.
- 9. Pharmacognosy of Guggul.

Answer Briefly

- 10. Explain the source, family and uses of Myrrh.
- 11. Modified Borntrager Test.
- 12. Principle and application of electrophoresis.
- 13. Explain the source, family and uses of Artemisia.
- 14. Explain the chemical structure and uses of Ephedra.
- 15. Therapeutic uses of Vincristine.
- 16. Chemical constituents and uses of tea.
- 17. Application of Mass spectroscopy.
- 18. Chemical constituents and uses of ginger.
- 19. Chemical constituents and uses of opium.

(7x5=35)

(10x2=20)

Max. Marks: 75

Reg. No.....

(2x10=20)