

Roll No

PY-504

B.Pharmacy V Semester

Examination, December 2016

Pharmacognosy - III

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each questions are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

1. a) What are primary and secondary metabolites?
- b) What are the starting material for the synthesis of shikimic acid pathway?
- c) Describe the chemical test for alkaloids and terpenes.
- d) Describe in detail biosynthesis pathway and pharmacological activity of atropine.

OR

Describe in detail biosynthesis pathway of Reserpine.

2. a) Describe the chemical test for glycosides.
- b) Draw the structure of Digitoxin and Digoxin.
- c) Give the biosynthesis pathway for Cardiac glycosides.
- d) Describe the biosynthesis of Cholesterol.

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OR

Discuss the biosynthesis pathway to Flavonoid glycosides.

3. a) Write a note on chemical nature of phytoconstituents.
- b) Write about major amino acid for synthesis of majority of alkaloids.
- c) Write various test for steroidal compounds.
- d) Give the biological source, chemical constituents and uses of Vinca and Cinchona.

OR

Elaborate detail in pharmacognostical study of Nux vomica.

4. a) Give Qualitative test for Anthocyanin.
- b) Describe the biogenesis of menthol.
- c) Give biogenesis and pharmacological activity of Quinine.
- d) Write pharmacognostical account of Cinchona.

OR

Discuss general chemistry and Biogenesis of atropine and quinine.

5. a) Write the biological source of Veratrum and Tea.
- b) Write the biological source of Hyascyamus and Belladonna.
- c) Give the name of adulterant and allied species of Nux vomica seeds.
- d) Describe Phytochemical screening of flavonoids in a given plant extract.

OR

Explain systematic pharmacognostic profile of Datura.
