

( 3 Hours )

( Total Marks : 70 )

Please check whether you have the right question paper

**N.B.:** 1. All questions are compulsory.

2. Draw chemical structures and diagrams wherever necessary.

1. Answer the following :

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- i) Name the precursor molecule for the biosynthesis of Reserpine.
- ii) Give the biological source and use of Hydnocarpus oil.
- iii) Write the complete biological source of a natural pesticide.
- iv) Define glycoalkaloids and mention its application.
- v) Name a drug, which answers Dragendorff's test positive.
- vi) Give biological source and name the glycoside present in Bitter Almond.
- vii) Give composition and properties of Tagetes.
- viii) Give the biological source and use of a Stramonium.
- ix) Give the biological source and draw the structure of ephedrine.
- x) What is the confirmatory test and biological source of Rhubarb?
- xi) Mention biological source and uses of Galls.
- xii) Name and draw any two diagnostic microscopic characters of Kurchi.
- xiii) Give the significance of iodine value in evaluation of fixed oils.
- xiv) Outline the test for tannins.
- xv) Give the biological source of any two alkaloidal drugs used as CNS stimulants.

2. i) Discuss beeswax with respect to its biological source, preparation, chemical constituents and uses. 4

ii) Compare and contrast between the two sources of catechu. 4

iii) Outline the biosynthetic pathway for emetine. 3

3. i) Give a detailed account of cinchona. 4

ii) Write a note on cynogenetic glycosides. 4

iii) Discuss any two nutraceuticals used as for treatment of hypercholesterolemia. 3

4. i) Give a pharmacognostic scheme for opium. 4

ii) Discuss a drug containing naphthaquinone glycosides. 4

iii) Write a short note on Hypericum. 3

5. i) Discuss the Pharmacognosy of Senna. 4

ii) Classify alkaloids with suitable examples. 4

iii) Give an account of urushiols. 3

6. i) Give the biological source, preparation and applications of Olive oil. 4

ii) Write a note on alliaceous drugs. 4

iii) Give an account of pyrethrum in pest management. 3