

Please check whether you have got the right question paper.

- N.B: 1. All questions are compulsory.
2. Draw chemical structures and diagrams wherever necessary.

- Q.1** Answer the following: **15**
- i. Name the precursor molecule for biosynthesis of Quinine.
 - ii. Give the biological sources of an oil used as an anti-oxidant.
 - iii. Give the biological source and name the probable constituent responsible for pesticide activity of Tobacco.
 - iv. Mention any two nutraceuticals with active constituents used as antihyperlipidemic.
 - v. Name a drug which answers Borntragers test positive.
 - vi. Give biological source and constituents of a drug containing naphthaquinone glycoside.
 - vii. Give biological source, and uses of Isothiocyanate glycosides.
 - viii. Give the uses and examples of glycolipids.
 - ix. Give biosource and constituents of any one phenylalanine derived alkaloids.
 - x. Give the biological source and uses of 2 drugs containing Prunasin.
 - xi. Mention biological source of 2 drugs containing hydrolysable tannins.
 - xii. Write the biological source and chemical constituent of any one alkaloidal drug used as an antiprotozoal.
 - xiii. Name and draw any two diagnostic microscopic characters of Senna.
 - xiv. Give the significance of "Iodine value" for evaluation of fixed oils.
 - xv. Outline the confirmatory test for "catechin".
- Q.2**
- i. Discuss linseed oil with respect to its biological source, method of preparation chemical constituents and uses. **4**
 - ii. Discuss biological source, cultivation and preparation, chemical constituents and uses of Galls. **4**
 - iii. Outline the biosynthetic pathway for tropane alkaloid. **3**
- Q.3**
- i. Give a detailed account of Rauwolfia. **4**
 - ii. Write a note on 'Thiophenes'. **4**
 - iii. Discuss two nutraceuticals used as antidiabetic agents. **3**
- Q.4**
- i. Give detailed account of Opium **4**
 - ii. Discuss any two drugs containing anthraquinone glycosides, used as colourants. **4**
 - iii. Write a short note on Hypericum. **3**
- Q.5**
- i. Discuss the pharmacognosy of Ergot. **4**
 - ii. Explain the chemical classification of tannins with suitable examples. **4**
 - iii. Give biological source, preparation and application of lecithin. **3**
- Q.6**
- i. Give a detailed account of olive oil. **4**
 - ii. Write a note on Purine alkaloids. **4**
 - iii. Give an account of Neem in pest management. **3**
