

[Marks: 70]

Please check whether you have got the right question paper.

- N.B:
1. All questions are compulsory.
 2. Write all sub-questions together.
 3. Draw structure and diagram wherever necessary.

Q.1 Answer the following.

- a) Write name and structure of active constituent of oil of wintergreen.
- b) Enlist methods of extraction of volatile oil.
- c) Give biological source of any one aldehyde containing volatile oil drug.
- d) Give biological source of a steroidal saponin containing drug used as a galactogogue.
- e) Write chemical test for detection of deoxy sugar in cardiac glycosides.
- f) Mention bio potential of Ginseng.
- g) Give confirmatory test for Colophony.
- h) Write source of any one oleo resin containing drug.
- i) Give name and structure of any one iso-flavone derivative.
- j) Write biological source of any one herbal photo sensitizer drug.
- k) Write biological source of any one terpenoidal anti-cancer drug.
- l) Mention traditional uses of Ashoka bark.
- m) Give biological source of any one herbal disintegrant.
- n) Mention any two examples of marketed ayurvedic churna formulation.
- o) Write name and structure of any one phenyl propanoid marker.

Q.2

- a) Describe complete pharmacognosy of Cassia cinnamon **OR** Fennel. 4
- b) Write a note on Crocin and Zeaxanthin 4
- c) Write a note on any two herbal colorants 3

Q.3

- a) Describe in detail about Liquorice. 4
- b) Give source, constituents and traditional uses of Shankpushpi and Kalmegh 4
- c) Write short note on lemon peel **OR** peppermint as herbal flavoring agent. 3

Q.4

- a) Give source, method of preparation, chemical constituents and uses of Eucalyptus oil. 4
- b) Explain de-toxification process of Ayurvedic drugs with any two examples. 4
- c) Write a short note on Cannabis **OR** Ginger. 3

Q.5

- a) Describe complete pharmacognosy of *Digitalis purpurea*. 4
- b) Give source, constituents and uses of Buckwheat and Orange peel. 4
- c) Write a note on regulatory requirement for manufacturing of ASU drugs. 3

Q.6

- a) Describe any two examples of Herb-Drug interactions. 4
- b) Write source, chemical constituents and a confirmatory chemical test for Asafoetida and Guggul. 4
- c) Give biosynthetic scheme of Coriandrol. 3
