

[Time: 3 Hours]

[Marks:80

Please check whether you have got the right question paper.

- N.B:
- 1) All questions are compulsory
 - 2) Illustrate answers with sketches and structures wherever required.
 - 3) Answers to sub questions must be written together.

Q. 1 (a) State whether True/False and justify all the following statements, giving suitable examples:- **8**

- i) Acacia is an example of mineral origin crude drug.
- ii) Glycerol is used as a clearing agent in microscopic examinations.
- iii) Starch grains are produced in mitochondria.
- iv) Saponification test is used to differentiate between fixed and volatile oils.
- v) Coppicing method is used for collection of root-based crude drugs.
- vi) Cotton is a sclerenchymatous fibre.
- vii) Guar gum is a pathological product.
- viii) Abrin is used for protein digestion.

(b) Answer the following :- **12**

- i) Give merits and demerits of taxonomical method of classification of crude drugs.
- ii) Enlist the chemo microscopic of reagents used in examination of seed-based drugs.
- iii) Differentiate between bark and wood. Give suitable examples.
- iv) Write a note on coumarins.
- v) Give two examples of natural pest control agents, with their biological source.
- vi) Write a note on keiselguhr.

Q. 2 i) Explain the status and significance of pharmacognosy in Ayurveda and aroma therapy. **4**

ii) With the help of suitable labelled diagrams, explain the salient histological features of a typical leaf based drug. **4**

iii) What are oils? Give the source, preparation constituents and uses of castor oil. **4**

Q. 3 i) Giving suitable examples, write a note on simple fruits. **4**

ii) What are tannins? Give complete classification of tannins with suitable examples, chemical tests and their applications. **4**

iii) Give complete pharmacognostic account of a gum of microbial origin. **4**

Q. 4 i) Give one example, important biological activity and basic chemical nucleus for : **4**

a) Purine or pyridine-piperidine type alkaloids

b) Anthquinone or cyanogenetic glycosides.

ii) Discuss the factors affecting cultivation of crude drugs. **4**

iii) Give source, prepatration and uses of 'bromelain' and 'casein'. **4**

TURN OVER

- Q. 5 i) With suitable examples, give complete chemical classification of triterpenoids. 4
ii) Write a note on any one protein fibre. 4
iii) Give biological source, chemical constituents and uses of 'Shatavari' and 'Kalmegh'. 4
- Q. 6 i) Write a note on unorganized drugs. 4
ii) a) Give the source and uses of serratiopeptidase
b) Give source, constituents and uses of amla.
iii) Give complete pharmacognostic account of any two oils of animal origin. 4