

[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**.

1. (a) State true or false and justify all the statements with significant reasons or examples: **8**
  - i) Gelatin is an example of mineral – origin crude drug.
  - ii) Picric acid is used for identifying endospermic tissue.
  - iii) All seeds contain conducting tissues.
  - iv) Ferric chloride test is answered positive by both flavonoids and tannins.
  - v) Coppicing method is used for the collection of flower based crude drug.
  - vi) Jute is a cellulosic fiber.
  - vii) Chitin is a pathological product.
  - viii) Ricin is used for protein digestion.
- (b) Answer the following : **12**
  - i) Give merits and demerits of chemical classification of crude drug.
  - ii) Enlist two examples each of mountants and clearing agents.
  - iii) Differentiate between organized and unorganized drugs.
  - iv) Write a brief note on flavonoids.
  - v) What is polyploidy and mutation. Give suitable examples.
  - vi) Write a note on bentonite.
2. (i) Explain the status and significance of pharmacognosy in Siddha and Aromatherapy. **4**
- (ii) With the help of suitable labelled diagrams, explain the salient morphological & histological features of bark-based drugs. **4**
- (iii) What are Waxes? Explain source, preparation, constituents and use of Wool fat. **4**
3. (i) What is Inflorescence? Explain the different types of inflorescence with suitable examples. **4**
- (ii) Give complete classification of saponins with suitable examples, chemical test and important biological activities. **4**
- (iii) Give the pharmacognostic account of a carbohydrate drug which is commonly used as a microbiological medium. **4**

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4. (i) Give one example, important biological activity and basic chemical nucleus for **4**
  - a) Quinoline / Tropane class of alkaloids
  - b) Isothiocyanate / Anthraquinone class of glycosides
- (ii) Write a note on natural pest control agents. **4**
- (iii) Write a note on source, preparation and uses of streptokinase and thyroid hormones. **4**
  
5. (i) Give complete classification of carbohydrates with suitable examples. **4**
- (ii) Write a note on **any two** fibers obtained from stem. **4**
- (iii) Give biological source, chemical construction & uses of 'guggul' and 'chirata'. **4**
  
6. (i) Write a note on calcium oxalate crystals **4**
- (ii)
  - a) Give the source, chemical test and uses of gelatin. **2**
  - b) Give source, constituent and use of Brahmi. **2**
- (iii) Give complete pharmacognostic account of **any one** drying oil. **4**