

**Q.P. Code :36440**

**[Time: Three Hours]**

**[ Marks:80]**

Please check whether you have got the right question paper.

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

- Q.1
- a) State whether true or false and justify all the statements with significant reasons or examples. 08
- i) Talc is an example of plant origin crude drug.
  - ii) Stage micrometer is used in quantitative microscopy.
  - iii) Racemose inflorescence shows centrifugal arrangement of flower.
  - iv) Shinoda's test is used to distinguish between triterpenoids and steroids.
  - v) Indole acetic acid is an example of cytokinin.
  - vi) Rayon is a synthetic fibre.
  - vii) Ricinoleic acid is a saturated fatty acid.
  - viii) Urokinase is a fibrinolytic agent.
- b) Answer the following: 12
- i) Give merits and demerits of pharmacological classification of crude drug.
  - ii) Explain with suitable examples role of mountants and clearing agents in microscopy.
  - iii) Discuss starch as an ergastic cell content.
  - iv) Write a brief note on coumarins.
  - v) Give the different types of soils.
  - vi) Discuss kieselghur as mineral origin drug.
- Q.2
- i) Explain the status and significance of pharmacognosy in Unani and Chinese medicine. 04
  - ii) Write a note on dried latex, dried juices and dried extracts with examples. 04
  - iii) Write the source, preparation, constituents, chemical test and uses of Indian tragacanth. 04
- Q.3
- i) Differentiate between roots and rhizomes. Explain microscopical features of roots with suitable diagrams. 04
  - ii) Give classification of tannins with suitable examples, Write chemical test and important biological activities. 04
  - iii) Give complete pharmacognostic account of cod-liver oil and wheat germ oil. 04
- Q.4
- i) Write one example, important biological activity & structure of basic chemical nucleus for : 04
    - a) Amino alkaloid
    - b) Cyanogenetic glycoside
  - ii) Write a note on collection of crude drugs. 04
  - iii) Write a note on protein hydrolysates and thyroid hormones. 04

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- Q.5 i) Write a note on volatile oils. 04  
ii) Write in brief about fibres which respond to millions test positive. 04  
iii) Write biological source, chemical constituents and uses of Amla & Tulsi. 04
- Q.6 i) Write a note on hydathodes, waterpores and epidermal trichomes with suitable examples. 04  
ii) a) Write source composition and applications of ricin. 02  
b) Write source chemical constituents and uses of 'punarnava.' 02  
iii) Differentiate between fats and waxes, write a note on wax obtained from animal source. 04

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