Instructions –

(1) All Questions are Compulsory.

(2) Answer each next main Question on a new page.

(3) Illustrate your answers with neat sketches wherever necessary.

(4) Figures to the right indicate full marks.

(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

1. Attempt any EIGHT of the following: 16

a) Define the following:
   (i) Oxytocics
   (ii) Antitussives

b) Name the family to which the following crude drugs belong to:
   (i) Pyrethrum
   (ii) Garlic
   (iii) Myrrh
   (iv) Coriander

c) What are pharmaceutical aids? Give examples.

d) Write contribution of following scientist to pharmacognosy.
   (i) Sushruta
   (ii) Galen
e) Write the synonym for the following crude drugs:
   (i) Rauwalfia
   (ii) Tulsi
   (iii) Ashwagandha
   (iv) Chaul moogra oil

f) Mention which part of the plant is used as crude drug in case of:
   (i) Arjuna
   (ii) Ginger
   (iii) Belladonna
   (iv) Aconite

g) Name the drug which contains the following chemical constituents:
   (i) Vasicine
   (ii) Emetine
   (iii) Vincristine
   (iv) Purpurea glycosides A and B

h) Write ideal properties of sutures.

i) Describe Morphological characters of Ginger with diagram.

j) Enlist various Leaf constants used for drug evaluation.

k) State the uses of the following crude drugs:
   (i) Glycyrrhiza
   (ii) Yeast

l) Mention the adulterants of dried clove flower buds.
2. Attempt any FOUR of the following:  
   a) Explain 'Pharmacological system of classification of crude drugs along with its advantages and disadvantage.
   b) Explain 'Life cycle of Ergot'.
   c) Write Biological source chemical constituents and uses of Amla or Cinchona.
   d) Write about ‘Ayurveda system of Medicine’.
   e) Define the following with examples.
      (i) Carminatives
      (ii) Laxatives
   f) Draw a neat and well labelled diagram of “T.S. of cinnamon bark”.

3. Attempt any FOUR of the following:  
   a) What are the different means by which crude drugs are adulterated?
   b) Describe method of collection and preparation of ‘Senna Leaves’ for market.
   c) What are alkaloids? Name the reagents used for identification of alkaloids by precipitation method.
   d) Write the Biological source, chemical constituents and uses of Gokhru or Nutmeg.
   e) Explain the following:
      (i) Mace
      (ii) Balsam
      (iii) Resins
   f) Describe the method of preparation for silk fibre.
4. **Attempt any FOUR of the following:**

   a) What are volatile oils? Explain “Enfleurage method” for extraction of volatile oils.
   
   
   c) Name the crude drugs used as Astringent. Write the Biological source and chemical constituents of any one drug.
   
   d) What are glycosides? Explain ‘Saponin Glycosides’.
   
   e) Write Biological source, chemical constituents and uses of “Lemon oil” or Sandalwood.
   
   f) Define Antidiabetics? Give examples of antidiabetic crude drug and write the biological source of any one drug.

5. **Attempt any FOUR of the following:**

   a) What are tannins? Classify them.
   
   b) Differentiate between organised and unorganised crude drugs with example.
   
   c) Explain the characteristics features of umbelliferous drug.
   
   d) Write biological source of Honey. Explain ‘Fiehe’s test’.
   
   e) What are surgical dressings? Write the official requirements of surgical dressings.
   
   f) Write chemical tests for Asafoetida.

6. **Write chemical tests for the following crude drugs:**

   (any FOUR)

   a) Aloe
   
   b) Benzoin
   
   c) Gelatin
   
   d) Wool
   
   e) Nux-vomica
   
   f) Ergot