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.

Marks

1. Attempt any EIGHT of the following: 16

   a) What is Ayurveda? Describe contribution of “Sushrut” in Indian History.

   b) Why Saponin glycosides are not safe for intravenous administration?

   c) Define and write one example of
      (i) Antiseptic
      (ii) Diuretics

   d) Which parts of the plant is used as a drug in case of
      (i) Aloe
      (ii) Gymnema
      (iii) Coriander
      (iv) Rauwolfia

P.T.O.
e) Write the name of drug for which following chemical test is applied
   (i) Borntrager Test
   (ii) Klunge’s Test
   (iii) Fiehe’s Test
   (iv) Keller Killiani Test

f) Define pharmacognosy. Give the contribution of Hippocrates.

g) Give any four characteristics features of Umbelliferous fruits.

h) Mention the synonym of following drugs
   (i) Asafoetida
   (ii) Dioscorea
   (iii) Castor oil
   (iv) Cinnamon

i) Draw a well labelled diagram showing morphological characters of “Datura leaf”.

j) Name the family of following drugs.
   (i) Colchicum
   (ii) Ashwagandha
   (iii) Ginger
   (iv) Tragacanth

k) Suggest the drugs containing following chemical constituents.
   (i) Reserpine
   (ii) Rhein
   (iii) Bassorin
   (iv) quinine, quinidine

l) Differentiate between organised and unorganised crude drug.
2. Attempt any THREE of the following:  
   a) Explain the chemical method of classification with its merits and demerits.
   b) Define Pharmaceutical aids. Give the classification of it with examples.
   c) Describe method of cultivation, collection and preparation for market of opium.
   d) What are volatile oil? What are the methods of extraction of volatile oil.
   e) Write the name of the drug which passes the following Chemical Test and explain it.
      (i) Vitali-Morin Test
      (ii) Swelling factor Test.

3. Attempt any THREE of the following:  
   a) Describe life cycle of Ergot.
   b) Write the synonyms, biological source of (any two)
      (i) Liquorice
      (ii) Gokhru
      (iii) Sandalwood
   c) What is Ash value? Write its types and Give the importance of Ash value in evaluation of drug.
   d) Mention the adultrants and substituents of (any two).
      (i) Digitalis
      (ii) Clove
      (iii) Nux-vomica
   e) Give the chemical constituents and uses of (any two)
      (i) Sandalwood
      (ii) Vasaka leaf
      (iii) Garlic

P.T.O.
4. **Attempt any THREE of the following:**

a) Draw a well labelled diagram of T.S. of Nux-Vomica seed and describe the same.

b) Define suture and Ligature. Write the ideal requirement of Surgical dressings.

c) Differentiate between
   
   (i) Gum and mucilage
   
   (ii) Leaf and leaflet

d) Define Anti Rheumatic. Give the example of it and write Biological source, chemical constituents of any one drug.


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

a) Define fibre. Describe the method of preparation of cotton fibre.

b) Define the following with example:
   
   (i) Antihypertensives
   
   (ii) Antileprotics
   
   (iii) Enzymes
   
   (iv) Antitussive

c) What are vitamins? Describe biological source, chemical constituents and uses of drug containing vitamin ‘C’.

d) Define Resin. Classify resin combination with example.

6. **Write chemical tests of crude drugs (any FOUR):**

a) Benzoin
b) Wool
c) Starch
d) Gelatin
e) Acacia
f) Pale catechu