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) Define Pharmacognosy. Name the scientist who coined the term Pharmacognosy.
   b) Write name of drug of the following synonyms:
      (i) Crow fig
      (ii) Ma-Huang
      (iii) Periwinkle
      (iv) Banda soap
   c) Define with examples:
      (i) Cardiotonics
      (ii) Antiseptic.
   d) Which part of plant is used as drug in case of:
      (i) Rauwolfia
      (ii) Arjuna.
      (iii) Rhubarb
      (iv) turmeric

P.T.O.
e) Write any four characteristics of Umbelliferous fruits.

f) Draw well labelled diagram of macroscopy of Ginger rhizome.

g) Name two drugs belonging of following family:
   (i) Apocynaceae.
   (ii) Liliaceae.

h) Write significance of:
   (i) Swelling index.
   (ii) Ash value.

i) Name the drug which contain following active chemical constituents:
   (i) Shogaol.
   (ii) Harman.
   (iii) Ajmalicine.
   (iv) Rhein

j) Write method of preparation of cotton fibers.

k) Write contribution of following scientist in the development of pharmacognosy:
   (i) Dioscoridis
   (ii) Galen.

l) Differentiate between leaf and leaflet.

2. Attempt any **FOUR** of the following: **12**

   a) Define resins. Write resin combinations.

   b) Explain different methods of adultration with examples.

   c) Define oxytocics. Explain life cycle of ergot.

   d) Write morphological method of classification of crude drug along with merits and demerits.

   e) Define alkaloids with examples. Write identification test for alkaloids.

   f) Write biological source, chemical constituents and uses of Cinchona.
3. **Attempt any FOUR of the following:**  

a) Write microscopical method of evaluation of crude drug.

b) Draw well labelled diagram of T.S of fennel or Nux vomica and explain it.

c) Write about.
   (i) Vitali – Morein test
   (ii) Modified borntrager test
   (iii) Killer – killani test

d) Write diagnostic characteristics of leaf (leaf constant).

e) Write chemical constituents of
   (i) Ephedra
   (ii) Digitalis
   (iii) Sandalwood.

f) Write biological source, chemical constituents and uses of vasaka.

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

a) Define pharmaceutical aids. Classify pharmaceutical aids with examples.

b) Differentiate between organized crude drug and unorganized crude drug with examples.

c) Define Tannin. Write types and pharmaceutical applications of tannin.

d) Write biological source, chemical constituents and uses of Rauwolfia.

e) Define with examples:
   (i) Diuretics
   (ii) Antitussive
   (iii) Antidysertric

f) Write uses of the following:
   (i) Dioscorea.
   (ii) Pyrethrum
   (iii) Shatavari
5. **Attempt any FOUR of the following:**

a) Write cultivation, collection and preparation of Senna for the market.

b) Define and classify fibres. Write ideal requirements of surgical dressings.

c) Write biological source, chemical constituents and uses of Madhunashini or Shankhpushpi.

d) Define Antitumor. Write chemical constituents and uses of vinca.

e) Define volatile oil. Write Isolation methods of volatile oil.

f) Enlist Indigenous system of medicine. Write about Ayurvedic system of medicine.

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

a) Acacia.

b) Pale Catechu

c) Turmeric

d) Agar

e) Asafoetida

f) Senna