MASTER OF PHARMACY EXAMINATION, 2018
(2nd Semester)

Pharm. Chemistry - II

Time: Three hours Full Marks: 100

Answer any ***five*** questions taking at least ***two*** from Group A

GROUP – A

1. a) What are indicative substances?
   Explain its importance in chromatography of herbal drugs with example.

   b) Differentiation with BRS and PRS.
   State their importance assay of herbal drugs with at least two examples.

   c) Describe different features of phyto-pharmaceuticals as drug and its recent development in India

   6+6+8 = 20

2. a) Describe Synergy in herbal medicine. How this can be established in a multi component herbal medicines explain with example.

   b) Describe the method for isolation of the following:
   i) Piperine from *Piper nigrum*
   ii) Caffeine from Tea
   iii) Quinine from Cinchona

   11+9 = 20

3. Describe the assay procedure and the structure of the following herbal drugs as described in I.P. 2014
   a) Kalmegh
   b) Manjistha
   c) Gudmar
   d) Bhringraj

   4x5 = 20

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M.Pharmacy 1st Year Second Semester -2018

Sub; Pharmaceutical Chemistry II

Answer any five questions taking at least two from each group.

GROUP - B

Q.4 a.Mention the contribution of Paul Ehrlich on drug development.

b.Discuss the interface of biology with medicine.

c. What are the issues in drug discovery?

d. What are the environmental insult to normal physiology?

e. Why were the dream of developing new drugs in India fizzled out? Explain.

2+2+2+2+12=20

Q.5 a. What do you mean by the term 'lead' in drug discovery and development?

b. How can the following help in 'lead' finding?

choosing a disease, choosing a target, target specificity, selectivity between species and within body. Mention the pitfalls.

c. What are the bioassays adopted? How can HTS and screening by NMR help in 'lead' finding?

d. Mention the importance of screening of natural products, the plant kingdom, the microbial world, marine and animal source, venoms & toxins and medical folklore for exploring 'lead' compound?

e. How can screening of synthetic compound libraries help in 'lead'development?

2+4+5+5+4=20

Q.6 a. What are the importance of natural drugs?

b. Discuss with a scheme the development of a 'Drug' from a 'Medicinal plant'.

c. Discuss in short the Bioactivity-Directed isolation of Natural products.

d. Explain with examples some of the plant secondary metabolites used as life saving drug, with structure and use each of alkaloid, glycoside, sesquiterpene, and anthraquinones.

4+3+3+10=20