

[Total No. of Questions - 10] [Total No. of Printed Pages - 2]
(2124)

1757

M. Pharmacy 1st Semester Examination
Pharmaceutical Cosmetics and Herbal Drug Analysis
MP-311

Time : 3 Hours

Max. Marks : 90

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

SECTION - A

Attempt any TWO questions, each question carry equal marks.

1. What is titration? Describe theory of acid-base titration, principles neutralization indicators, neutralization curves and displacement titrations with examples. (15)
2. Describe significance of important techniques used in the identity, purity and quality of plant drugs as described in IP such as palisade ratio, stomatal number, stomatal index, vein islet number and veinlet termination number. (15)
3. Write an exhaustive note on identification and quantitative determination of preservatives, antioxidants, colouring materials used in liquid dosage forms. (15)

SECTION - B

Attempt any FIVE questions, each question carry equal marks.

4. What is redox titration? Explain ceric ammonium sulphate titrations with official example as given in IP 1996. (8)
5. Explain Principles and pharmaceutical applications of complexometric titrations involving the displacement of one complex by another. (8)

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6. Describe principles and methodology involved in thermogravimetric analysis and differential thermal analysis. (8)
7. Describe in detail safety and legislation for cosmetic products. (8)
8. Describe physicochemical methods of quality control of crude drugs such as melting point, swelling index, foaming index, bitterness value, moisture content and ash and extractive values. (8)
9. Describe in brief principle and pharmaceutical application of high frequency titrations and conductometric titrations. (8)

SECTION - C

Attempt any FIVE questions, each question carry equal marks.

10. Write short note on any seven of the followings.
 - (a) Quantitative determination of emulsifiers in pharmaceutical formulations.
 - (b) Give definition of acid value and iodine value.
 - (c) Pharmaceutical application of pH measurements.
 - (d) Quality control of skin care products.
 - (e) Define with example bromated titration.
 - (f) Explain sources of markers.
 - (g) Describe quality control parameter of eye shadows. (5×4=20)
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