Printed Pages: 01 **Sub Code: PHARM244**

Paper Id: 150424 **Roll No.** | | | | | | | | | | |

B. PHARM.
(SEM 4TH) THEORY EXAMINATION 2017-18
PHARMACEUTICAL ANALYSIS- II

Time: 3 Hours ***Total Marks: 100***

Note: 1. Attempt all Sections.

SECTION A

1. Attempt *all* questions in brief. 2 x10 = 20

a. Enlist the features of EDTA.
b. Define the term "Diazotization".
c. Differentiate between indicator and reference electrode.
d. Define the term "Radioimmunoassay".
e. Write the Nernst equation.
f. Define the term "Aprotic solvent".
g. Differentiate between paper and thin layer chromatography.
h. Define the term "Chromatography".
i. Explain the dielectric constant.
j. Define the term "Electrode potential".

SECTION B

2. Attempt any *three* of the following: 10 x 3 = 30

a. Write the principle of complexometric titration. How end point is detected in complexometric titration?
b. Discuss the principle of Karl- Fischer titration for moisture estimation.
c. Describe the principle, instrumentation and application of thin layer chromatography.
d. Write the instrumentation and working of reference electrode.
e. Write a note on solvents used in non-aqueous titration.

SECTION C

3. Attempt any *one* part of the following: 10 x 1

(a) Explain the estimation of nitrogen by Kjeldahl method.
(b) Describe the principle and application of polarography.

4. Attempt any *one* part of the following: 10 x 1

(a) Write the principle and applications of radioassay.
(b) Discuss the theory and pharmaceutical applications of column chromatography.

5. Attempt any *one* part of the following: 10 x 1

(a) Discuss the principle and detection methods used in amperometry.
(b) Discuss the methods used for determination of alcohol in galenical preparations.

6. Attempt any *one* part of the following: 10 x 1

(a) Write the principle, instrumentation and applications of conductometry.
(b) Describe the principle and applications of paper chromatography.

7. Attempt any *one* part of the following: 10 x 1

(a) Write the principle and instrumentation of potentiometry.
(b) Describe the principle, types and applications of diazotization titrations.