

Roll No.

Total No. of Questions : 10]

20/12
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B.Pharmacy (Sem.-1st)
PHARMACEUTICAL ANALYSIS - I

SUBJECT CODE : PHM - 1.1.1

Paper ID : [D0101]

[Note : Please fill subject code and paper ID on OMR]

Time : 03 Hours

Maximum Marks : 80

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.
- 3) Attempt any **Three** questions from Section - C.

Section - A

Q1)

(15 × 2 = 30)

- a) Primary standard.
- b) Molarity and Molality.
- c) Accuracy and Precision.
- d) Iodimetry and Iodometry.
- e) Oxidising and reducing agents.
- f) Solubility product.
- g) Common ion effect.
- h) Mixed indicators.
- i) Co-precipitation.
- j) Buffers.
- k) Nearst equation.
- l) Significant figures.
- m) What is relevance of Q-test in pharmaceutical analysis.
- n) How will you standardize 0.1 N KMnO_4
- o) Cell representation.

Section - B

(4 × 5 = 20)

- Q2)** Derive Henderson-Hasselbach equation for acidic buffer.
- Q3)** What are errors, classify them with examples.
- Q4)** Discuss various theories of neutralization indicators.
- Q5)** Write a note on Volhard's method.
- Q6)** What are oxidation-reduction curves.

Section - C

(3 × 10 = 30)

- Q7)** Describe the various steps involved in gravimetric analysis.
- Q8)** Calculate mean, standard deviation and coefficient of variation for contents of aspirin in 10 tablets (mg) all as below :
4.5, 4.6, 5.0, 4.6, 4.0, 4.1, 4.8, 4.0, 4.9,
- Q9)** What are precipitation titrations? Explain the various factors affecting solubility of a precipitate.
- Q10)** Write down the principle and procedure involved in the assay of :
- (a) Boric acid.
 - (b) Ammonium chloride.

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