

Write the following information in the first page of Answer Script before starting answer

ODD SEMESTER EXAMINATION: 2020-21

Exam ID Number _____

Course _____ Semester _____

Paper Code _____ Paper Title _____

Type of Exam: _____ (Regular/Back/Improvement)

Important Instruction for students:

1. Student should write objective and descriptive answer on plain white paper.
2. Give page number in each page starting from 1st page.
3. After completion of examination, Scan all pages, convert into a single PDF, rename the file with Class Roll No. **(2019MBA15)** and upload to the Google classroom as attachment.
4. Exam timing from 10am – 1pm (for morning shift).
5. Question Paper will be uploaded before 10 mins from the schedule time.
6. Additional 20 mins time will be given for scanning and uploading the single PDF file.
7. Student will be marked as ABSENT if failed to upload the PDF answer script due to any reason.

**B.PHARM.
FIRST SEMESTER
PHARMACEUTICAL ANALYSIS-I
BP-102 T**

Duration : 3 hrs.

Full Marks : 75

(**PART-A : Objective**)

Time : 20 min.

Marks : 20

Choose the correct answer from the following:

1X20=20

1. API stands for?
 - a. Active Pharmacy Interpretation
 - b. Acute Pulmonary Interaction
 - c. Active Pharmaceutical ion
 - d. Active Pharmaceutical ingredients
2. Which of the following is widely used for quantitative analysis?
 - a. Non Aqueous titration
 - b. Aqueous titrations
 - c. Acid base titrations
 - d. Volumetric Analysis
3. % w/v express:
 - a. Number of ml of solute in 100 gm of product
 - b. Number of ml of solute in 100 ml of product
 - c. Number of gm of solute in 100 ml of product
 - d. None of these
4. Random error is also known as:
 - a. Accidental error
 - b. Indeterminate error
 - c. Determinate error
 - d. Both a and b
5. Following are the types of systemic error except:
 - a. Errors of methods
 - b. Instrument method
 - c. Personal error
 - d. Random
6. According to Bronsted theory _____ is a substance that can accept protons.
 - a. Acid
 - b. Buffer solution
 - c. Base
 - d. Both a and b
7. Amphiprotic solvents are both:
 - a. Aprotic, Protophilic
 - b. Protophilic, Protogenic
 - c. Protogenic, Aprotic
 - d. None of these
8. Non Aqueous titrations are based on:
 - a. Arrhenius, theory
 - b. Lewis theory
 - c. Bronsted Lowry theory
 - d. None of this
9. Which of the following is not an indicator of non aqueous titration?
 - a. Naphtholbenzoin
 - b. Oracet blue B
 - c. Crystal violet
 - d. Complexometric titartion

(PART-B : Descriptive)

Time : 2 hrs. 40 min.

Marks : 35

[Answer any seven (7) questions]

1. Write down the applications of Conductometry. 5
2. Explain the theory of Redox titrations. 5
3. Write down the applications of diazotization titrations. 5
4. What is colloidal state? Enumerate the properties of colloidal particles. 5
5. Write down the various types of complexometric titrations. 5
6. Define Systemic error and explain in brief the types of systemic error. 5
7. List out some indicators used in non aqueous titration. 5
8. Write about the estimation of Sodium Chloride (Mohr's method). 5
9. Explain about Volhard's method. 5

(PART-C : Long type questions)

[Answer any two (2) questions]

1. Explain principle, assay procedure and types of diazotization titrations. 10
2. Discuss the neutralization curve for strong acid v/s strong base titration and show how pH changes during the titration. 10
3. Explain in details about the acid base titrations. 10

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