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Total No. of Pages : 02

Total No. of Questions : 10

B.Pharma (2011 to 2016) (Sem.-4)
PHARMACEUTICAL ANALYSIS-II
Subject Code : BPHM-402
M.Code : 46232

Time : 3 Hrs.

Max. Marks : 80

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of FIFTEEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.

SECTION-A**Q1. Explain in brief :**

- a) Define Werner's coordination number with examples.
- b) What type of drugs are analysed by non-aqueous titrations? Give two examples.
- c) Give composition of Karl-Fischer's reagent.
- d) Define partition coefficient.
- e) Give two examples of radiopaque media and their applications.
- f) What chromatographic technique is most commonly used for purification of amino acids? Justify with reason.
- g) What do you understand by HETP? How does it affect resolution?
- h) Give two major limitations of gas chromatography.
- i) How do you express SHE connected to a copper half cell composed of Cu wire in 1M CuSO_4 solution?
- j) Name any two techniques used to locate equivalence point in an acid base titration.
- k) What is specific conductance?



- l) Define limiting current. What is its significance?
- m) How pH affects extraction?
- n) What is void volume of a HPLC column? How is it related to separation efficiency?
- o) How would you analyse sulfacetamide by titrimetric analysis?

SECTION-B

- Q2 What is the principle of conductometric methods of analysis? Discuss the construction and working of a conductivity cell.
- Q3 Explain the concept of masking and demasking in complexometric titrations with examples. Give an application.
- Q4 Write an explanatory note on Kjeldahl nitrogen determination.
- Q5 How an isotope differs from a radioisotope? Give examples. Explain their applications in pharmacy.
- Q6 What is the principle of ion-exchange chromatography? Write an account on various ion-exchange based stationary phases and their applications.

SECTION-C

- Q7 What is the principle of liquid-liquid chromatography? Write a detailed account on various stationary phases used in it with emphasis on their chemistry, applications and limitations.
- Q8 Explain the different components of instrumentation of GLC with the help of neat diagrams.
- Q9 How do you prepare 0.1 M solution of HClO_4 ? Give principle, chemical equations involved, procedure and general calculations for its standardization and one application.
- Q10 What is the principle of polarographic analysis. Discuss various factors affecting it. Explain the construction and working a dropping mercury electrode with the help of a neat diagram.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.