

UG Odd Semester (CBCS) Exam., December—2016

UNIT—II

PHARMACEUTICAL SCIENCE

(3rd Semester)

Course No. : BPH-308 (C)

(Pharmaceutical Analysis—I)

*Full Marks : 75**Pass Marks : 30**Time : 3 hours**The figures in the margin indicate full marks
for the questions*Answer **five** questions, taking **one** from each Unit

UNIT—I

1. Define significant figures. What are the rules for retaining significant figures? Explain in brief about different types of error. How can the error be minimized? 2+4+6+3=15
2. Define qualitative and quantitative analyses. Explain in detail about the primary standard substance. Write a brief note on 'accuracy' and 'precision'. 4+6+5=15

3. What do you mean by law of mass action? Explain the term ionic product of water. Write a brief note on buffer solution. 3+4+8=15
4. Discuss in brief about various concepts of acid and base. Define the term pH. Calculate the pH of a 2.33×10^{-5} (N) solution of strong acid. 7+2+6=15

UNIT—III

5. Define argentometric titration. What are the different methods used in the determination of end points in argentometric titration? Explain the terms 'solubility' and 'solubility product'. 3+6+(3×2)=15
6. How will you estimate halide by Mohr's and Volhard's methods? 7½+7½=15

UNIT—IV

7. Discuss in detail about different types of EDTA titration. Explain masking and demasking with examples. How will you prepare and standardize EDTA solution? 6+5+4=15

(3)

8. How will you prepare and standardize 0.1 (N) perchloric acid? Write a note on solvents used in non-aqueous titration. $8+7=15$

UNIT—V

9. Define co-precipitation and post-precipitation. Write a detailed note on digestion. What are the advantages and disadvantages of gravimetric analysis? $6+5+4=15$
10. Write notes on the following : $7\frac{1}{2}\times 2=15$
- (a) Thermogravimetry
- (b) Steps in gravimetric analysis

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