Enrolment No._____

Roll No.: _____

PARUL UNIVERSITY

PARUL INSTITUTE OF PHARMACY

B.PHARM FIRST SEMESTER

FIRST INTERNAL THEORY EXAMINATION : 2018-19

Subject Name: Pharmaceutical Analysis
Subject Code: BP102T
Time: 02:00 pm to 03:15 pm

Date: 25/09/2018
Total Marks: 30

Instructions:
1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1 Multiple Choice Questions: 01

(1) What is limit test ?

a) test for organic impurity
b) test for inorganic impurity
c) test for purity
d) none

(2) Weight equivalent to mol.wt is dissolved in 1 litre of solvent is… 01

a) 1 molar solution
b) 1 normal solution
c) 1 molal solution
d) None

(3) Very low concentration is expressed in 01

a) %w/v
b) molarity
c) ppm
d) %v/v

(4) Which of the following reduction reaction? 01

a) $Ag^{+} + e^{-} \leftrightarrow Ag$

b) $Ce^{+3} \leftrightarrow Ce^{+4} + e^{-}$

c) $Fe^{+2} \leftrightarrow Fe^{+3} + e^{-}$

d) All of above

(5) $IO_3^{-} + 6Ti^{3+} + 6H^{+} = \boxed{A} + 6Ti^{4+} + 3H_2O$ 01

Identify A for above mentioned reaction.

a) IO^{-}
b) I_2
c) I^{-}
d) I^{+}

(6) Calculate the pH of a solution containing 50 ml of 0.05M HCl and 10 ml 0.1 M NaOH. 01

a) 1.3
b) 9.4
c) 5.3
d) 3.6

01

(7) Which of the following is amphiprotic solvent?

a) Dioxane
b) Anhydrous Acetic acid.
c) Perchloric acid
d) None

01

(8) With reference to Ostwald's theory of Indicator choose the most appropriate chemical reaction.

a) In_{ox} + ne^- $\leftrightarrow$ In_{red} (colour A / colour B)
b) $HIn \leftrightarrow In^- + H^+$ (colour A / colour B)
c) a and b both
d) none

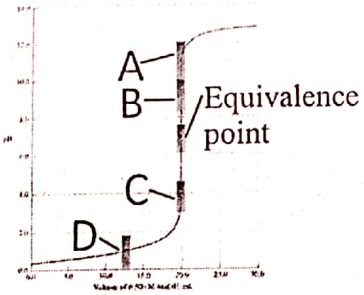
01

(9) Following are the types of standards used for analysis.

(a) Primary
(b) Tertiary
(c) Secondary
(d) Both (a) & (c)

01

(10)



What will be best choice of indicator for above mentioned neutralization curve?

a) A
b) D
c) C
d) B

Q.2 Long Answers: (Any One)

(1) What is Quality Control and Quality Assurance? What is the importance of Pharmaceutical Analysis for controlling the quality of drug? Classify various analytical techniques for pharmaceutical analysis. 10

(2) Explain buffers and how they act. Derive Henderson hasselbatch equation. 10

Q.3 Short answers (Any two)

(1) Write a note on Indicators used in redox titration. 05

(2) Explain levelling and differentiating effects of solvent with examples. 05

(3) Enlist different types of redox titrations and explain any one in detail. 05

********** All the best **********