R15

Code: 15R00302

B.Pharm II Year I Semester (R15) Regular Examinations November 2016
PHYSICAL PHARMACY – I

Time: 3 hours   Max. Marks: 70

PART – A
(Compulsory Question)
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1   Answer the following: (10 X 02 = 20 Marks)
  (a)   Define relative humidity.
  (b)   Give two examples for amorphous substance.
  (c)   Write about the zeroth level of thermodynamics.
  (d)   Mention the importance of refractive index.
  (e)   Mention the terms used for the expression of solution.
  (f)   Write any two properties of electrolyte solutions.
  (g)   Specify the buffer equation.
  (h)   Write the formula for pH calculation.
  (i)   Mention the formula used for predicting expiry date.
  (j)   Give examples for solvents that affect drug stability.

PART – B
(Answer all five units, 5 X 10 = 50 Marks)

UNIT - I

2   Add notes on:
  (a)   Liquid state & liquid crystalline state.
  (b)   Glossy state and solid state.

OR

3   Explain two component systems with suitable example.

UNIT - II

4   Describe second law of thermodynamics with its application.

OR

5   Write the principle and procedure involved in optical rotatory dispersion.

UNIT - III

6   Describe in detail the elevation of boiling point and osmotic pressure with examples.

OR

7   Discuss in detail the modern theory of strong electrolytes.

UNIT - IV

8   Explain in detail the methods for adjusting tonicity.

OR

9   Mention the formula for calculating acidity constant. Write its importance with respect to pH.

UNIT - V

10   Enumerate the different factors affecting drug stability.

OR

11   Outline the principle and procedure involved in accelerated stability studies.

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