



**RB-1305-06**  
**First Year B. Pharm. Examination**  
**April / May – 2010**  
**Pharmaceutical Chemistry - I**

Time : 3 Hours]

[Total Marks : 70

**RB-1305**

**Instruction :**

<p>नीचे दशांशवैल निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : <b>F. Y. B. Pharm.</b></p> <p>Name of the Subject : <b>Pharmaceutical Chemistry - 1</b></p> <p>Subject Code No. : <b>1 3 0 5</b> Section No. (1, 2,.....): <b>1</b></p>	<p>Seat No. : <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/></p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; margin-top: 10px;">Student's Signature</div>
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- 1 (a) Define following : (any ten) 10
- (1) Monograph
  - (2) Official substance
  - (3) Limit tests
  - (4) Impurity
  - (5) Lewis acid and base
  - (6) Laxative
  - (7) Water
  - (8) Water for injection
  - (9) Pharmaceutical chemistry
  - (10) Acid and base
  - (11) Antidote
  - (12) Opalescence.

- (b) Write method of preparation and assay of following : **9**  
(any **three**)
- (1) Sulphuric acid
  - (2) Potassium permanganate
  - (3) Oxygen gas
  - (4) Silver nitrate,
- (c) Write short note on following : (any **four**) **16**
- (i) Buffer capacity
  - (ii) Dentifrice
  - (iii) Acid-base theory
  - (iv) Applications of radio isotopes
  - (v) Limit test for heavy metals.

## RB-1306

### Instruction :

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Name of the Examination :  
F. Y. B. Pharm.

Name of the Subject :  
Pharmaceutical Chemistry - 1

Subject Code No. : 1 3 0 6 Section No. (1, 2,.....) : 2

Seat No. :

Student's Signature

1 Explain any **eleven** of the following : 11

- (1) Refractive index
- (2) Beer's Law
- (3) Catalysis
- (4) Rate and Order of reaction
- (5) Optical rotation
- (6) Osmosis
- (7) Conductance
- (8) Surface tension
- (9) Viscosity
- (10) Molarity
- (11) Boiling Point
- (12) Quantum yield
- (13) Degree of freedom.

2 Explain any **two** of the followings : 12

- (1) Write a note on colligative properties
- (2) Write about various methods for estimation of surface tension
- (3) Write about Beer-Lambert's law for photochemical reaction.

**3** Write any **three** of the following :

**12**

- (1) Write a note on optical reaction
  - (2) What is chemical kinetics? Derive reaction rate constant and half life for first order reaction.
  - (3) Explain First law of thermodynamics
  - (4) Write about factors affecting viscosity.
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