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BINA CHOWDHURY CENTRAL LIBRARY  
(GIMT & GIPS)  
Azara, Hatkhowapara,  
Guwahati -781017

Roll No. of candidate

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2019

D. PHARM. 1<sup>st</sup> Year End-Term Examination

PHARMACEUTICAL CHEMISTRY - I

Full Marks – 80

Time – Three hours

The figures in the margin indicate full marks  
for the questions.

1. Answer the following questions : (10 × 1 = 10)

- (a) (i) First edition of I.P. was published in the year \_\_\_\_\_.
- (ii) First edition of B.P. was published in the year \_\_\_\_\_.
- (iii) Aluminium hydroxide gel is used as \_\_\_\_\_.
- (iv) Chlorinated lime is called Bleaching powder. (True/False)
- (v) Sodium fluoride is used as \_\_\_\_\_.
- (iv) Potassium iodide is soluble in water. (True/False)
- (vii) Sodium chloride (0.9% w/v) is used as \_\_\_\_\_.

[Turn over

- (viii) Sodium bicarbonate is a non-systemic antacid. (True/ False)
- (ix) Lead limit test is carried out in Nessler cylinder. (True/False)
- (x) Barium sulphate is a Radioopaque contrast medium. (True/False)

Choose the correct answer: (10 × 1 = 10)

- (b) (i) Talc is obtained from \_\_\_\_\_.
- (a) Animal source
  - (b) Plant source
  - (c) Marine source
  - (d) Mineral source
- (ii) Magnesium sulphate is \_\_\_\_\_.
- (a) Bulk purgative
  - (b) Saline purgative
  - (c) Irritant purgative
  - (d) None of the above
- (iii) Sodium meta-bisulphite is a \_\_\_\_\_.
- (a) Antioxidant
  - (b) Antacid
  - (c) Antiseptic
  - (d) Antimicrobial
- (iv) Iodine is soluble in \_\_\_\_\_.
- (a) Water
  - (b) Ether
  - (c) Potassium iodide aqueous solution
  - (d) None of the above
- (v) Ferrous sulphate is called \_\_\_\_\_.
- (a) Green vitriol
  - (b) Blue vitriol
  - (c) White vitriol
  - (d) None of the above

- (vi) Radioactivity is measured by \_\_\_\_\_.
- (a) G.M counter method
  - (b) pH meter
  - (c) Spectrophotometer
  - (d) Volumetric titration method
- (vii) Arsenic limit test is carried out in \_\_\_\_\_.
- (a) Nessler cylinder
  - (b) Separating funnel
  - (c) Gutzeit apparatus
  - (d) All of the above
- (viii) Iron preparations are used in \_\_\_\_\_.
- (a) Insomnia
  - (b) Anaemia
  - (c) Arthritis
  - (d) Diarrhoea
- (ix) Thioglycolic acid is used in \_\_\_\_\_.
- (a) Sulphate limit test
  - (b) Chloride limit test
  - (c) Iron limit test
  - (d) Heavy metal limit test
- (x) Latest edition of I.P. was published in \_\_\_\_\_.
- (a) 2010
  - (b) 2014
  - (c) 2018
  - (d) 2019

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Short Answer questions (any six): (6 × 5 = 30)

2. (a) Write the Bronsted-Lowry concept of acid and base with suitable examples. (5)
- (b) Define Antacid with examples. Classify them. Write two ideal properties of antacid. (1+2+2=5)
- (c) Write the preparation of Hydrogen Peroxide in laboratory scale with its storage condition. (5)

- (d) Write in short the clinical uses of Oxygen and Carbon dioxide. (5)
- (e) Write the storage, handling and uses of radioactive pharmaceuticals. (5)
- (f) Discuss the combination of oral electrolyte powders and solutions. (5)
- (g) Write the classification of cathartics with their mechanism of action with suitable examples. (5)
- (h) Define Antiseptic and Disinfectant with example. Write the mechanism of action of antimicrobials. (2+3=5)

Long answer questions (any *three*): (3 × 10 = 30)

3. (a) Discuss the principle and method of Arsenic Limit test. (5+5=10)
- (b) Define Acidosis and Alkalosis. Write the preparation and uses of Aluminium hydroxide gel and sodium bicarbonate. (3+2+3+2=10)
- (c) (i) What do you mean by Topical agents. Write the preparation and uses of Iodine. (2+2+2=6)
- (ii) Write the role of Fluoride in the treatment of Dental Carries. (4)
- (d) Write the various sources of impurities in pharmaceutical chemicals. (10)
- (e) Explain about the Geiger-Muller counter with diagram. (10)

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