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NC-16112020701010200 Seat No. _____

**Master of Pharmacy Management (Sem. I)
(CBCS) Examination**

January – 2017

**Pharmaceutical Chemistry - I
(Pharmaceutical Inorganic & Physical Chemistry)
(New Syllabus)**

Time : 3 Hours]

[Total Marks : 80

- Instructions :** (1) Attempt three questions from each section.
(2) Questions 1 and 5 are compulsory.
(3) Tie each section separately.
(4) Figure to the right indicates full marks for the respective question.

SECTION - I

- 1** Explain the following terms : (any seven) **14**
- (1) Pharmacopoeia
 - (2) Impurity
 - (3) Radioisotope
 - (4) Buffer capacity
 - (5) Adsorbent
 - (6) Hematinics
 - (7) Respiratory stimulant
 - (8) Dentifrices
 - (9) Order of reaction
 - (10) Astringent
- 2** Discuss sources of impurities in detail. **13**
- 3** (1) Write a note on physiological acid-base balance. **7**
(2) What are gastrointestinal agents? Briefly classify them with suitable examples. **6**

- 4 Answer the following :
- (1) Write down various clinical applications of radiopharmaceuticals. 7
 - (2) Explain solubility chart as well as storage conditions of official substances. 6

SECTION - II

- 5 Answer the following questions : (any two) 14
- (1) What is catalysis? Write a note on homogeneous and heterogeneous catalyst. Explain important characteristics of enzyme catalysis.
 - (2) Define limit test. Explain limit test of chloride in detail.
 - (3) Classify: Dental products. Discuss Sodium fluoride as dental product.
- 6 (1) Define: Antidotes. Discuss mechanism of action of antidote poisoning. Write a note on cyanide poisoning and its treatment. 7
- (2) What are antioxidants and preservatives? Write preparation and properties of any one antioxidant. 6
- 7 (1) Discuss the physiological role of oxygen and describe its method of preparation, properties, storage conditions and uses. 7
- (2) Differentiate between : 6
- (1) Hypochlorhydria and Hyperchlorhydria
 - (2) Hypokalemia and Hyperkalemia
 - (3) First order reaction and Second order reaction
- 8 Answer the following :
- (1) How the radioactivity measured? Write a note on Gieger Muller counter. 7
 - (2) Write the assay principle of following compounds. 6
 - (1) Boric acid
 - (2) Copper sulphate
 - (3) Hydrogen peroxide