[Total No. of Questions - 9] [Total No. of Print Pages - 2] (2126)

## - 0 DEC 2016 16353(D) - 0 CC 2016

### B. Pharmacy 1st Semester Examination

# Pharmaceutical Chemistry-I (Inorganic Chemistry) (CBS) BP-101

Time: 3 Hours

Max. Marks: 60

The candidates shall limit their answers precisely within the answerbook (40 pages) issued to them and no supplementary/continuation sheet will be issued.

**Note:** Attempt five questions in all selecting one question from each sections A, B, C and D. Section E is compulsory.

#### SECTION - A

- (a) Discuss the principle and procedure involved in limit tests for
  - (i) lead (ii) chloride (iii) sulphate (6)
  - (b) Write the preparation, properties and assay of EDTA. (6)
- 2. (a) What do you mean by trace and essential elements? Write a short note on official compounds of iron. (6)
  - (b) Define impurity. How do the impurities get included into the pharmaceutical compounds of transition elements?

    (6)

#### **SECTION - B**

- 3. Describe in detail the functions of electrolytes used in replacement therapy. (12)
- 4. (a) Giving suitable examples, categorise the inorganic compounds acting as gastrointestinal agents. (4)
  - (b) What are protective and adsorbents? Write the preparation, tests for purity, assay and uses of bismuth sub-carbonate. (8)

#### SECTION - C

- (a) Describe the mechanism of action of astringents. Write the preparation, properties, tests for purity and assay of alum.
  - (b) Give an account of characteristics of antimicrobial agents. How they act? (5)
- 6. (a) What are dentifrices? Write the preparation, uses and assay of dibasic calcium phosphate. (6)
  - (b) Present a detailed account of the role of fluoride in dental health. Describe the preparation and assay of sodium fluoride. (6)

#### **SECTION - D**

- 7. Give a detailed account of the following:
  - (i) Expectorants (ii) Poisons and antidotes (iii) Sedatives (12)
- 8. What are pharmaceutical aids? Write their classification. Discuss in detail the following:
  - (i) Preservatives (ii) Adsorbents (iii) Suspending agents (12)

#### **SECTION - E**

- 9. Define the following: (any twelve)
  - (a) Haematinics

(b) Emetics

(c) Electrolytes

(d) Cathartics

(e) Diluents

(f) Anaesthetics

(g) Tonicity

- (h) Buffers
- (i) Scelerosing agents
- (j) Chelating agents

(k) Excipients

(I) Acidifying agents

(m) Colorants

(n) Anti-oxidants

(12×1=12)