Day : Friday   Time : 10:00 AM TO 1:00 P.M.
Date : 10-12-2021 W-2021-5728   Max. Marks : 70

N. B. :

1)   **Q. No. 1** and **Q. No. 5** are **COMPULSORY**. Out of remaining attempt **ANY TWO** questions from each Section.
2)   Figures to the right indicate **FULL** marks.
3)   Answers to both the sections should be written in **SEPARATE** answer books.

SECTION – I

Q. 1 A) Answer **ANY FOUR** out of six   **(08)**

  i)   Define the term Molarity and Normality.
  ii) Give definition of Determinate error.
  iii) What are significant figures?
  iv) What is primary standard?
  v)   Significance of volhard method.
  vi) What is Standard Deviation?

B) Discuss in detail principle and methods involved in the precipitation titration.   **(03)**

Q. 2 Define aqueous acid base titration. Describe in detail with suitable example, theories of acid base indicators.   **(12)**

Q. 3 a) Define error. How to minimize source of error. Describe with suitable examples.   **(07)**

b) Write in detail about non aqueous solvents.   **(05)**

Q. 4 Write short notes on **ANY THREE** of the following: **(12)**

  a)   Mohr Method
  b)   Masking and demasking agent
  c)   Back titration
  d)   Solubility products
  e)   Titration curve for strong acid v/s weak base

SECTION – II

Q. 5 A) Answer **ANY FOUR** out of six   **(08)**

  i)   What is the role of dentifrices?
  ii) Give the ideal properties of antiplaque agent.
  iii) Why is zinc important for human health?
  iv) What are the side effects associated with antacid therapy?
  v)   State the importance of acidifiers?
  vi) Define the desensitizing agent in dental products and its example.

B) Give the applications of Radio Pharmaceuticals.   **(03)**

P. T. O.

Q. 6 **a)** Elaborate term antacids? Give the MOA, properties and uses of aluminium **(07)** containing antacids.

b) Discuss any two mechanism of action of antimicrobial agents. **(05)**

Q. 7 Define the term electrolytes. Enlist discuss the electrolyte replacement **(12)** therapy.

Q. 8 Write short notes on **ANY THREE** of the following: **(12)**
a) Radiopaque contract Media
b) Antioxidant
c) Dentifrices
d) Saline cathartics
e) Pharmaceutical waters

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