

PHARMACEUTICAL CHEMISTRY

Code No. : 2602

Time : 3:00 Hours]

[Maximum Marks : 80

NOTES:

- i) Attempt all questions.
- ii) Students are advised to specially check the Numerical Data of question paper in both versions. If there is any difference in Hindi Translation of any question, the students should answer the question according to the English version.
- iii) Use of Pager and Mobile Phone by the students is not allowed.

PART - A

Answer any six questions. Each question carries equal marks.

[6 × 5 = 30]

Q1) Describe the principle and chemical reactions involved in the limit test for the following: (any one) [5]

- a) Iron
- b) Arsenic

Q2) What is redox titration? Discuss about the standardization of potassium permanganate against oxalic acid. [5]

Q3) a) Define any two of the following: [2×1=2]

- i) Haematinics.
- ii) Topical Agents.
- iii) Gastro-intestinal Agents.

b) Write a note on saline cathartics. [3]

Q4) What are heterocyclic compounds classify heterocyclic compounds giving one structure from each class. [1+4=5]

Q5) Write the chemical structure of any five of the following. [5×1=5]

- a) Paracetamol
- b) INH
- c) Dapsone
- d) Metformin
- e) Phenobarbital
- f) Imipramine Hydrochloride
- g) Dopamine

Q6) Write the stability and storage conditions of any five of the following:

- a) Chloramphenicol
- b) Insulin
- c) Aspirin
- d) Sulphacetamide
- e) Cyclophosphamide
- f) Diazepam
- g) Acyclovir

Q7) Write the popular brand name and uses of any five of the following:

- a) Isobarbide dinitrate.
- b) Sulfacetamide.
- c) Propranolol.
- d) Diclofenac.
- e) Ofloxacin.
- f) Rifampicin.
- g) Remdesivir.
- h) Chlorpromazine.

[5×1=5]

**PART - B**

Answer any ten questions. All questions carry equal marks.

[10 × 3 = 30]

Q1) Discuss any three different sources of impurities in pharmaceuticals.

[3]

Q2) Write in short about gravimetric analysis.

[3]

Q3) Discuss the combination of antacids.

[3]

Q4) Write a note on narcotic antagonists.

[3]

Q5) Discuss in short about Anti-hypertensive drugs with suitable examples.

[3]

Q6) Write the storage conditions of any three of the following.

[3×1=3]

- a) Oxygen
- b) Silver Nitrate.
- c) Ferrous Sulphate.
- d) Sodium Fluoride.
- e) Aluminium Hydroxide Gel.

Q7) What are Anti-neoplastic agents? Give some examples.

[1+2=3]

Q8) Write in brief about Non-Steroidal Anti inflammatory Agents.

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[3]

Q9) What are hypoglycemic agents? Give examples of oral hypoglycemic agents.

[1+2=3]

Q10) Define any three of the following:

[3×1=3]

- Diuretics.
- Anaesthetics.
- Anticonvulsants.
- Dental products.

Q11) Write about Anti-tubercular Drugs.

[3]

### PART - C

Multiple choice questions/Fill-in the blanks. Answer all questions. Each question carries equal marks. [20 × 1 = 20]

#### Multiple Choice Questions.

Q1) A chemical that changes its colour in acidic and basic medium during titration is called.

- Indicator
- Indicator
- Analyte
- None of these

Q2) Which of the following is antacid?

- Hydrogen Peroxide
- Ferrous Fumarate
- Aluminium Hydroxide Gel
- Silver Nitrate

Q3) General Formula for alkene is:

- $C_n H_{2n+2}$
- $C_n H_{2n}$
- $C_n H_{2n-2}$
- None of these

Q4) Ferrous sulphate is used in the treatment of:

- Scurvy
- Diabetes
- Anaemia
- Marasmus

Q5) Which of the following is heteroatom?

- B
- K
- N
- P

Q6) Which of the following is Anti-Neoplastic Drug?

- Methotrexate
- Chloroquine phosphate
- Spironolactone
- Epinephrine

Q7) Calpol is the brand name of which of the following?

- Terbutaline
- Fluconazole
- Ethambutol
- Paracetamol

(P.T.O.)

