

Printed Pages– 10

Roll No.

2041172(041)

**Diploma in Pharmacy (First Year) Examination,
April-May, 2022
(^{PCI} New Scheme)
(Pharmacy Branch)**

PHARMACEUTICAL CHEMISTRY (THEORY)

Time Allowed : Three hours

Maximum Marks : 80

Note : Question paper is of three section i.e. (A), (B) and (C). Section-A consists of 20 MCQs of 1 mark each. Section-B consists of 7 questions out of which 6 question should be attempted, 5 marks each. Section-C consists of 11 questions out of which attempt 10 question 3 marks each.

Section-A

(Objective Type Questions) 20×1=20

Note : Attempt all questions. Each question carries 1 mark.

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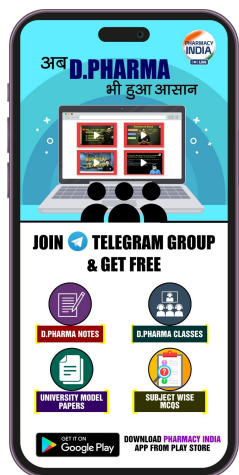
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1. Multiple choice question :

- (i) Indian pharmacopoeia is published by :
- (a) Indian Pharmacopoeia Commission
(b) India Pharmacopoeia Council
(c) Indian Pharmacopoeia Council
(c) None of the above
- (ii) First edition of Indian Pharmacopoeia was published in :
- (a) 1954
(b) 1955
(c) 1956
(d) 1944
- (iii) The usual limit of metallic impurities in substance as per I.P. is :
- (a) 10
(b) 1.0
(c) 20
(d) 2.0

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- (iv) Guitzeit apparatus used in :
- (a) Limit test of Chloride
(b) Limit test of Sulphate
(c) Limit test of Iron
(d) Limit test of Arsenic
- (v) NH_4Cl is used as :
- (a) Systemic Acidifier
(b) Electrolyte Replenisher
(c) Expectorant
(d) All of the above
- (vi) Molecular formula of Blue Vitriol is :
- (a) $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$
(b) $\text{CoSO}_4 \cdot 5\text{H}_2\text{O}$
(c) $\text{FeSO}_4 \cdot 5\text{H}_2\text{O}$
(d) $\text{Na}_2\text{SO}_4 \cdot 5\text{H}_2\text{O}$
- (vii) Calcium carbonate is used as :
- (a) Polishing Agent
(b) Desensitizing Agent



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- (c) Dentrifices
- (d) Anticaries Agent

(viii) Oxidation reduction titration is also known as :

- (a) Complexometric Titration
- (b) Gravimetric Titration
- (c) Gasometric Titration
- (d) Redox Titration

(ix) is used as titrant in non aqueous titration :

- (a) EDTA
- (b) Perchloric Acid
- (c) Sodium Nitrite
- (d) Silver Nitrite

(x) Spirit of salt is also known as :

- (a) HCl in Water
- (b) H₂SO₄ in Water
- (c) NaOH in Water
- (d) KOH in Water

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(xi) Heterocyclic compounds are :

- (a) Oxygen Containing
- (b) Sulphur Containing
- (c) Nitrogen Containing
- (d) All of the above

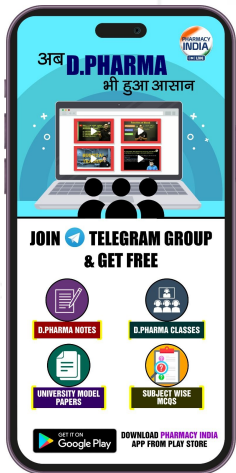
(xii) Antipsychotic and Neuroleptic is also known as :

- (a) Psychotizer
- (b) Neurotransmitter
- (c) Tranquillizer
- (d) Neuron inhibitors

(xiii) 1, 3, 7-trimethyl xanthine is a chemical name of :

- (a) Caffeine
- (b) Purine
- (c) Coramine
- (d) Theophylline

(xiv) The drugs which are used to relieve the pain are called :



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- (a) Antipyretic
- (b) Antiinflammatory
- (c) Analgesic
- (d) All of the these

(xv) Calpol is a brand name of which drug :

- (a) Aspirin
- (b) Paracetamol
- (c) Both (a) and (b)
- (d) None of these

(xvi) The drug which produces reversible loss of sensation in limited area without loss of consciousness is called as :

- (a) General Anaesthetics
- (b) Local Anaesthetics
- (c) Partial Anaesthetics
- (d) None of these

(xvii) Which drug is used as mydriatic in Ophthalmologic practice :

- (a) Atropine

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- (b) Benzene
- (c) Ephedrine
- (d) Adrenaline

(xviii) Neoplasm is the medical term of :

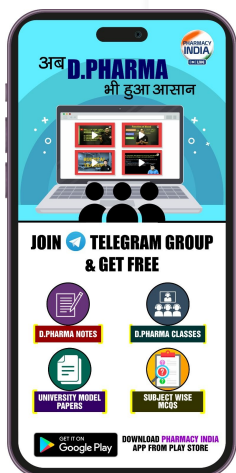
- (a) Leprosy
- (b) Pox
- (c) Cancer
- (d) Infection

(xix) What is causative organism of tuberculosis?

- (a) Mycobacterium laprae
- (b) Mycobacterium bacillus
- (c) Mycobacterium avium
- (d) Mycobacterium tuberculosis

(xx) Which of the following is not a :

- (a) Penicillin
- (b) Doxycycline
- (c) Amoxicillin
- (d) Ampicillin



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Section-B

(Long Answer Type Questions) 6×5=30

Note : Attempt any six questions. Each question carries 5 marks.

2. Write a note on Indian Pharmacopoeia.
3. Explain principle, reaction and procedure of limit test of Arsenic.
4. Explain acid base concept with examples.
5. Give the principle and method involved in Gravimetric method.
6. Define Anaesthetic. Explain four stages of Anaesthetic.
7. What are cholinergic drugs? Give the chemical name, structure, uses and marketed formulation of Acetylcholine.
8. Define antibiotics. Classify it with examples.

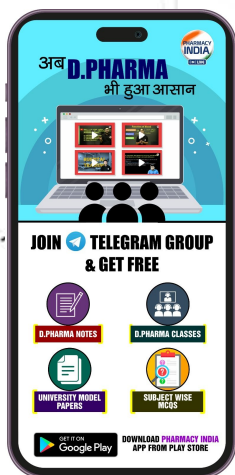
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Section-C

(Short Answer Type Questions) 10×3=30

Note : Attempt any ten questions. Each question carries 3 marks.

9. Define Impurity. Explain principle of limit test of Chloride.
10. Give the principle of complexometric titration.
11. Classify diuretics with examples.
12. Define sympathomimetic agent and classify it with examples.
13. Give the chemical name, structure and used of aspirin.
14. What is Hypertension? Classify antihypertensive drugs with examples.
15. What is Tuberculosis? Classify anti-tubercular drugs with examples.



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Give the structure, uses and brand name of following :

16. Neostigmine

17. Amoxicillin

18. Fluconazole

19. Phenytoin

