

Total No. of printed pages = 7

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Roll No. of candidate

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2020

D.Pharm 2nd Year End-Term Examination

PHARMACEUTICAL CHEMISTRY II

Full Marks – 50

Time – Two hours

The figures in the margin indicate full marks
for the questions.

Answer Question No. 1 and any *ten* from the rest.

A. Multiple choice questions : (any TEN) (10 × 1 = 10)

1. (i) Match the following:

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|-----------------|---------------------------|
| (w) Cis-platin | (i) Antibiotics |
| (x) Penicillin | (ii) Hypoglycemic agent |
| (y) Tolbutamide | (iii) Antihypertensive |
| (z) Losartan | (iv) Antineoplastic agent |

(a) w-(iv), x-(i), y-(ii), z-(iii)

(b) w-(iv), x-(i), y-(iii), z-(ii)

(c) w-(i), x-(iv), y-(iii), z-(ii)

(d) w-(iv), x-(iii), y-(ii), z-(i)

[Turn over

- (ii) Thyroxin is
- (a) T₄ (b) T₃
(c) T₂ (d) T₁
- (iii) Water soluble vitamin are
- (a) Vitamin A, B & C
(b) Vitamin A, D, E, & K
(c) Vitamin D, A, & K
(d) Vitamin B & C
- (iv) Penicillin V is
- (a) Acid - resistant
(b) Phenoxy methyl penicillin
(c) Obtain from natural source
(d) All of the above
- (v) Match the following:
- (w) Cephalosporin (i) Erythromycin
(x) Macrolides (ii) Doxycycline
(y) Penicillin (iii) Cephalexin
(z) Tetracyclines (iv) Cloxacilin
- (a) w-(iii), x-(ii), y-(iv), z-(i)
(b) w-(iv), x-(i), y-(iii), z-(ii)
(c) w-(iii), x-(i), y-(iv), z-(ii)
(d) w-(iv), x-(iii), y-(ii), z-(i)

- (vi) The IUPAC name of aspirin
- (a) 4-acetyloxybenzoic acid
 - (b) 2-acetylbenzoic acid
 - (c) 2-(acetyloxy)benzoic acid
 - (d) None of the above
- (vii) Co-trimoxazole inhibit the synthesis of
- (a) Folic acid synthesis
 - (b) PABA synthesis
 - (c) Pteridine synthesis
 - (d) None of the above
- (viii) Example of diuretics is
- (a) Furosemide
 - (b) Propranolol
 - (c) Telmisartan
 - (d) Theophylline
- (ix) Chloroquine belongs to
- (a) 8-aminoquinolones
 - (b) 4-aminoquinolones
 - (c) Artemisins
 - (d) Biguanides
- (x) Indomethacin is
- (a) Anti-pyretic (b) Analgesic
 - (c) Antihistaminic (d) NSAID

- (xi) Vincristine is
- (a) Vinca derivatives
 - (b) Taxol derivatives
 - (c) Podophyllotoxin derivatives
 - (d) Camptothecin derivatives
- (xii) Digitoxin on hydrolysis gives
- (a) Digoxigenin and Digitoxose
 - (b) Digitoxigenin and Digitoxose
 - (c) Glycone and Aglycone
 - (d) None of the above
- (xiii) The IUPAC name of isoniazid
- (a) pyridine-4-carbohydrazide
 - (b) pyrimidine-4-ketohydrazide
 - (c) pyridine-3-carbohydrazide
 - (d) None of the above
- (xiv) Adrenocorticoids include
- (a) Glucocorticoids
 - (b) Mineralocorticoids
 - (c) Both (a) and (b)
 - (d) None of the above
- (xv) Dapsone is
- (a) Antiamoebic (b) Antileprotic
 - (c) Antihelminthic (d) Antimalarial

(xvi) Example of adrenergic drug is

- (a) Isoprenaline
- (b) Propranolol
- (c) Neostigmine
- (d) Amitryptiline

(xvii) Valium causes

- (a) Stimulates CNS
- (b) Stimulates ANS
- (c) Depression of CNS
- (d) Depression of ANS

(xviii) Congo red is used for

- (a) Detection of cell wall
- (b) Detection of amyloid
- (c) Detection of corneal ulcers
- (d) Detection of kidney function

(xix) Antianginal drugs are

- (a) Vasodilators
- (b) Calcium channel blockers
- (c) β -adrenergic blockers
- (d) All of the above

(xx) Lignocaine comes under

- (a) Benzoic acid derivatives
- (b) p-aminobenzoic acid derivatives
- (c) Anilides
- (d) None of the above

B. Short answer type question (any *four*) (4 × 5 = 20)

2. Define tuberculosis. Classify anti-tubercular drugs with examples and write the drug profile of ethambutol. (1+2+2)
 3. Classify alkylating agents with examples and its mechanism of action. Write the drug profile of any one agent. (2+1+2)
 4. What do you mean by allergic reactions? How antihistamines help in these conditions? Classify them. (1+2+2)
 5. What are different types of diabetes? Classify hypoglycaemic agents with examples. (2+3)
 6. What is the causative agent of malaria? Classify antimalarial drugs. Write the drug profile of chloroquine. (1+2+2)
 7. Classify antihypertensive drugs with examples and mechanism of action of ACE inhibitors. (3 +2)
 8. What are diagnostic agents? Write a note on anticoagulants. (1+4)
 9. Differentiate between antiseptics and disinfectants. Classify them. Write the full drug profile of proflamine. (1+2+2)
- C. Long answer type question (any *two*) (2 × 10 = 20)
10. What is the mechanism of action of cardiac glycosides? Classify steroidal drugs with examples and drug profile of progesterone, testosterone and hydrocortisone. (2+2+6)

11. What are antibiotics? Classify antibiotics. Classify each class of β -lactum antibiotics with examples along with its mechanism of action. (1+3+6)
 12. Explain the different stages of general anaesthesia. Classify and explain mechanism of action of local anaesthetics. Write a short note on hypnotics and complete drug profile of phenobarbitone. (2+3+5)
 13. Define analgesics. Write the mechanism of action and drug profile of aspirin. Classify NSAIDs with examples and give drug profile of any one drug. (1+3+4+2)
 14. Write a detail note on fat soluble vitamins mentioning their sources, functions and disease caused due to their deficiency. (10)
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