

Roll No.

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Total No. of Pages : 03

Total No. of Questions : 22

B.Pharma (2017 Batch) (Sem.-5)
MEDICINAL CHEMISTRY II- THEORY
Subject Code : BP-501T
M.Code : 76786

Time : 3 Hrs.

Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.
3. SECTION-C contains NINE questions carrying FIVE marks each and students have to attempt any SEVEN questions.

SECTION-A**Choose the correct option in the following objective type questions :**

1. Enzymatic decarboxylation of histidine leads to the formation of ____
A. Histamine B. Dopamine C. Serotonin D. Noradrenaline
2. ____ is a aziridine ring containing antineoplastic agent.
A. Melfalan B. Chlorambucil C. Busulfan D. Thiotepa
3. Amyl nitrite is an ester of isoamyl alcohol with ____
A. Nitric acid B. Nitrous acid C. Nitric oxide D. Nitrous oxide
4. Site of action of carbonic anhydride inhibitor class of diuretic is ____
A. Proximal tubule B. Loop of Henle
C. Distal Tubule D. Collecting tubule
5. ____ is acyl-2-aminoimidazoline based selective α_2 adrenoceptors agonist
A. Clonidine B. Guanabenz C. Guanfacine D. L-Methyldopa



6. _____ is an alkaloid isolated from cinchona bark and used as anti-arrhythmic drug
 - A. Quinidine
 - B. Quinine
 - C. Cinchonine
 - D. Cinchonidine
7. In 5α -steroids, ring A and B are fused together with _____ fashion
 - A. Trans
 - B. Cis
 - C. Anti
 - D. Syn
8. _____ is characteristic feature of progestogens
 - A. Δ^4-3 - Keto
 - B. Aromatic ring A
 - C. $17\text{-}\beta$ -hydroxy
 - D. $11\text{-}\beta$ -Hydroxy
9. Naturally occurring thyroid hormones possess the _____ alanine side chain
 - A. L
 - B. D
 - C. L&D both
 - D. All of these
10. Which drug belongs to 2nd generation oral hypoglycemic agent?
 - A. Glyburide
 - B. Tolbutamide
 - C. Acetohexamide
 - D. Chlorpropamide

SECTION-B

11. Classify antineoplastic agents with one structural examples of each. Give synthesis and MOA of mercaptopurine.
12. Discuss the development of angiotensin converting enzyme inhibitors for the treatment of hypertension. Give synthesis and MOA of methyl dopa hydrochloride.
13. a) Describe detailed SAR of local anesthetics.
b) Give synthesis and MOA of procaine.

**SECTION-C**

14. Give structural classification of H_1 -antagonist and synthesis of promethazine.
15. Write a note on calcium channel blockers used for the treatment of angina.
16. Draw structures of any three H_2 -antagonists and give synthesis of any one of these.
17. Describe structures of thiazide class of diuretics. Give synthesis of chlorthiazide.
18. Discuss structures of cardiac glycoside used in the treatment of congestive heart failure.
19. Draw structures of any four anti-coagulants. Give structures of warfarin.
20. Describe typical structural feature of glucocorticoids and mineralocorticoids, citing two examples of each.
21. Give brief account on glucosidase inhibitors as anti-diabetic agents and synthesis of tolbutamide.
22. Write short note on oral contraceptives.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

