

Sample MCQ's
Final year B. Pharm Sem-VII (CBCS)
Subject: Pharmaceutical Chemistry-II

Q1. Select wrong statement about SAR of 1,4-DHP.

- A) 1, 4-dihydropyridine ring is essential for CCB activity.
- B) Ester groups at C-3 and C-5 positions of 1, 4-dihydropyridine ring optimizes the CCB activity.
- C) C-4 Phenyl ring substituent's is important for electronic nature rather than for size and position of substituent's.
- D) Substitution at the N-1 position or used of oxidized (Pyridine) or reduced (piperidine) ring systems generally decreases or abolishes activity

Q2. All CCB are act by blocking or inactivating ____ calcium channel

- A) L-type B) N-type
- C) P-type D) T-type

Q3. Select CCB compound present primarily in ionized form at physiological pH

- A) nifedipine B) verapamil & Amlodipine
- C) nifedipine & verapamil D) verapamil

Q4. amyl nitrite is an ester of _____ & _____

- A) isoamyl alcohol & nitrous acid B) isoamyl alcohol & nitric acid
- C) amyl alcohol & nitrous acid D) amyl alcohol & nitric acid

Q5. All of the following anti-arrhythmic drugs are from Class-IC except _____

- A) Lidocaine B) Mexiletine
- C) Tocainide D) Diltiazem

Q6. Class I anti-arrhythmic drugs acts by

- A) Other or unknown mechanisms. B) Blocking Calcium (Ca^{2+}) channel
- C) Blocking sodium (Na^+) channel D) Blocking Potassium (K^+) channel

Q7. 6-chloro-1,1-dioxo-2*H*-1,2,4-benzothiadiazine-7-sulfonamide is IUPAC name of which drug

- A) Hydroflumethiazide B) Trichlormethiazide
- C) Methyclothiazide D) Chlorothiazide

Q8. Which of the following diuretic drug contains Benzhydrazides moiety

- A) Chlorthalidone B) Indapamide C) Quinethazone D) metolazone

Q9. Furosemide is Site-2 Diuretic belonging to _____ Chemical class.

- A) 5-Sulphamoyl anthranilic acids B) 5-Sulphamoyl-3-amino benzoic acid
 C) Phenoxyacetic acids D) *Meta*-disulfamoylbenzene

Q10. _____ is tricyclic ring containing antihistaminic compound.

- A) Fexofenadine B) Loratadine
 C) Astemizole D) Cetirizine

Q11. Conversion of histidine into histamine is catalyzed by

- A) aldehyde dehydrogenase B) histamine N-methyl transferase
 C) L-histidine decarboxylase D) monoamine oxidase

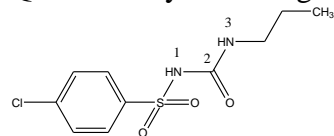
Q12. _____ is furan ring containing H₂-antihistaminic drug.

- A) cimetidine B) ranitidine
 C) famotidine D) nizatidine

Q13. All of the following drugs are from DPP-IV inhibitors Class except _____

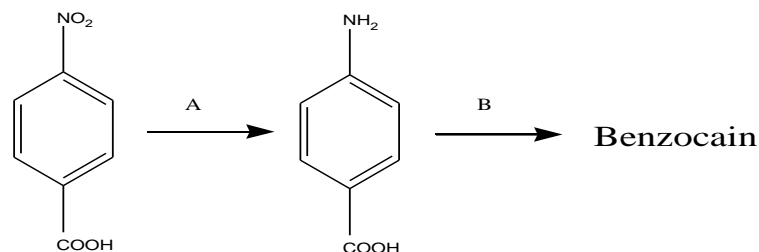
- A) saxagliptin B) vildagliptin
 C) sitagliptin D) exenatide

Q14. Identify following drug



- A) Tolbutamide B) Chlorpropamide
 C) Tolazamide D) Acetohexamide

Q15. Identify reagent A and B in following synthesis



- A) A= Sn/HCl, B= EtOH / H₂SO₄ B) A= Sn/HCl, B= MeOH / H₂SO₄
 C) B= Sn/HCl, A= EtOH / H₂SO₄ D) A= KMnO₄, B= EtOH / H₂SO₄

Q.16 Name the highly reactive chemical species generated during activation of Cyclophosphamide antineoplastic drug which causes extensive damage to cells of the kidney and bladder.

- A) Phospholene
- B) H radical
- C) Acrolein
- D) OH radical

Q.17 The Neuraminidase inhibitor, Oseltamivir is orally effective because of which structural feature

- A) It is a prodrug formed by converting carboxylic acid functional group into ester.
- B) Replacing hydrogen from amino group hydrogen with acyl moiety
- C) Presence of pentan-3-yloxy group at position 3
- D) Presence of Cyclohexene ring in the structure

Q. 18) The antiviral agent Stavudine from the class nucleotide reverse transcriptase inhibitor, is chemically known by which of the following names

- A) 2',3'-dideoxyinosine
- B) 2', 3'-dideoxycytidine
- C) 2', 3'-dideoxy- 2', 3'-didehydrothymidine
- D) 2',3',4'-trideoxyinosine

Q.19)Enhanced tissue selectivity is possible in nitrogen mustards, when the "R" group in the Pharmacophore structure is one of the following

- A) Aliphatic group
- B) methoxy group
- C) Aromatic group
- D) ethoxy group

20) The glucopyranose moiety of streptozocinantineoplastic agent confers what cell specificity

- A) Islet cell specificity
- B) Kidney cell specificity
- C) Lung cell specificity
- D) Heart cell specificity

Q.21 Select the correct statement about the antiviral agents from the class which affects virus attachment, entry and early viral replication

- A) Amantadine has more CNS side effects as compared to Rimantadine
- B) Rimantadine has more CNS side effects as compared to Amantadine
- C) Amantadine and Rimantadine both shows equal CNS side effects
- D) Amantadine and Rimantadine both do not show any CNS side effects

Q. 22 The first step in the mechanism of action of DNA alkylating agents is one of the following

- A) Intermolecular nucleophilic attack
- B) Intramolecularnucleophilic attack
- C) Hydrolytic depurination
- D) Intramolecular electrophilic attack

Q.23 Which enzyme is inhibited by 5-Fluorouracil

- A)Amidophosphoribosyltransferase
- B) Thymidylate synthase
- C)DNA polymerase
- D) DNA methyltransferase

Q.24 Azaerine acts by competitively inhibiting which of the following enzyme?

- A) Amidophosphoribosyltransferase
C) glutamineamidotransferase
- B) DNA polymerase
D) Thymidylate synthase

Q.25 The fifth step in the mechanism of action of Nitrogen mustard involves one of the following reaction

- A) Hydrolytic depurination
C) Electrophilic attack
- B) Nucleophilic attack
D) Substitution reaction

Q.26 Which of the following Nitrogen mustard agent belongs to miscellaneous class

- A) Cyclophosphamide
C) Busulfan
- B) Chlorambucil
D) Mechlorethamine

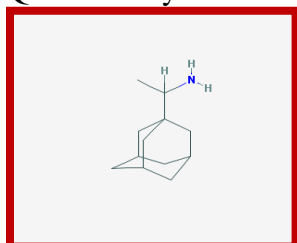
Q.27 Cancer is nothing but the;

- A) Uncontrolled growth of a cell
C) Death of a cell
- B) Controlled growth of a cell
D) Apoptosis of the cell

Q.28 Which of the following agent belongs to the class of Nitrosourea anticancer agent

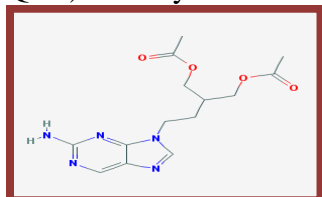
- A) Carmustine
C) Cyclophosphamide
- B) Mechlorethamine
D) Busulfan

Q.29 Identify the below given structure from the Antiviral class



- A) Amantadine
C) Zanamivir
- B) Rimantadine
D) Oseltamivir

Q.30) Identify the below given structure which is one of the prodrug of Acyclovir (M)



- A) Penciclovir
C) Vidarabine
- B) Famciclovir
D) Idoxuridine