

- x) The mechanism of action of atypical antipsychotic agents is based on the receptor subtype of
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|-------------------|----------------------|
| a) H ₁ | b) M ₁ |
| c) D ₁ | d) 5HT _{2A} |
- xi) The peripheral anionic site of cholinesterase consists of residues are:
- | | |
|---------------|----------------------|
| a) Serine | b) Glutamic acid |
| c) Both A & b | d) None of the above |
- xii) How much amount of Atropine metabolized in liver?
- | | |
|---------|--------|
| a) 100% | b) 50% |
| c) 80% | d) 30% |
- xiii) Tetrahydro furan ring comes in the structure of ----- drug.
- | | |
|----------------|-----------------|
| a) Pilocarpine | b) Methacholine |
| c) Carbachol | d) Bethanechol |
- xiv) Which group of Ach contributes to the binding of compound to the muscarinic receptor?
- | | |
|-------------------|-----------------|
| a) Ammonium group | b) Methyl group |
| c) Ethylene group | d) Ester-group |
- xv) Selective β_2 antagonist drugs are used to act on which part.
- | | |
|-----------------------|----------|
| a) Kidney | b) Brain |
| c) Respiratory system | d) Heart |
- xvi) Phenoxybenzamine inhibits the uptake of
- | | |
|--------------|-------------------|
| a) Histamine | b) Catecholamines |
| c) Histidine | d) Serotonin |
- xvii) In which of the following is stereoisomer of ephedrine?
- | | |
|--------------------|------------------|
| a) Pseudoephedrine | b) Mephentermine |
| c) Methoxamine | d) Metaephedrine |
- xviii) Bioisosters are similar in their-----.
- | | |
|--------------------------|------------------------|
| a) Physical properties | b) Chemical properties |
| c) Electronic properties | d) All of these |
- xix) Which of the following substance is the first precursor of Adrenaline formation?
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|-----------|-------------|
| a) Dopa | b) Dopamine |
| c) Serine | d) Tyrosine |
- xx) Which of the following reaction is catalysed by the enzyme adenylate cyclase?
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|------------------------------------|
| a) Conversion of ATP to cAMP |
| b) Conversion of AMP to cyclic AMP |
| c) Conversion of cyclic AMP to ATP |
| d) Conversion of cyclic AMP to AMP |

- 2. Solve any two.** **10x2**
=20
- a) What are narcotic analgesics, classify them, give in general SAR, Mode of action of narcotic analgesics.
 - b) Give classification of cholinomimetics with examples and write MOA and SAR of direct acting cholinomimetics. Outline synthesis of carbachol.
 - c) Define and classify antipsychotics. Discuss about SAR and MOA of phenothiazine as a antipsychotic.

- 3. Solve any seven.** **5x7**
=35
- a) Write about Bioisosterism and its applications in medicinal chemistry.
 - b) Write a note on glucuronidation reaction.
 - c) Give SAR of direct acting sympathomimetics.
 - d) Write biosynthesis of catecholamines.
 - e) Write SAR of beta blockers.
 - f) Write structure, IUPAC name, MOA and uses of Diazepam.
 - g) Outline the synthesis and uses of mefenamic acid.
 - h) Write a short note on salicylic acid derivatives as anti-inflammatory agents.
 - i) Give SAR of barbiturates as a hypnotic.
