



Dr. Arvind Kumar Gupta
(M.Pharm, PDCR, PGDMM & Ph.D)
GATE 2003 Qualified with 97.2 percentile
Dr. S. N. Dev College of Pharmacy
Shamli (U.P.)

Course Name : D. Pharm

Year : Second Year

Subject Name : Pharmacology

Topic Name : Hypnotics and sedatives

MULTIPLE CHOICE QUESTION

1. Which of the following is a primary characteristic of hypnotics and sedatives?

- A) Pain relief
- B) Muscle relaxation
- C) Consciousness suppression
- D) Sensory enhancement

Answer: C) Consciousness suppression

2. Which neurotransmitter system is primarily targeted by most hypnotics and sedatives?

- A) Dopaminergic
- B) Serotonergic
- C) GABAergic
- D) Cholinergic

Answer: C) GABAergic

3. Which of the following medications is a benzodiazepine commonly used as a sedative-hypnotic?

- A) Zolpidem
- B) Diphenhydramine
- C) Lorazepam
- D) Melatonin

Answer: C) Lorazepam

4. Which type of sedative-hypnotic drug is often used for short-term treatment of insomnia?

- A) Benzodiazepines
- B) Barbiturates
- C) Non-benzodiazepine receptor agonists
- D) Antihistamines

Answer: C) Non-benzodiazepine receptor agonists

5. Which of the following is a potential side effect of benzodiazepine use?

- A) Respiratory depression
- B) Bradycardia
- C) Hyperactivity

D) Hypertension

Answer: A) Respiratory depression

6. Zolpidem belongs to which class of medications?

A) Benzodiazepines

B) Barbiturates

C) Non-benzodiazepine receptor agonists

D) Antidepressants

Answer: C) Non-benzodiazepine receptor agonists

7. Which of the following statements about benzodiazepines is true?

A) They have a high risk of dependence and addiction.

B) They primarily target the histaminergic system.

C) They are contraindicated in patients with depression.

D) They are commonly used as first-line treatment for insomnia.

Answer: A) They have a high risk of dependence and addiction.

8. Which neurotransmitter is targeted by barbiturates?

A) Serotonin

B) GABA

C) Dopamine

D) Glutamate

Answer: B) GABA

9. Which of the following is a potential side effect of barbiturate use?

A) Increased anxiety

B) Respiratory depression

C) Hypertension

D) Insomnia

Answer: B) Respiratory depression

10. Which of the following drugs is commonly used as a sedative in the intensive care unit (ICU) setting?

A) Lorazepam

B) Zolpidem

C) Midazolam

D) Diphenhydramine

Answer: C) Midazolam

11. Which of the following statements about non-benzodiazepine receptor agonists is true?

- A) They have a high risk of respiratory depression.
- B) They are typically used for long-term treatment of insomnia.
- C) They have a low risk of dependence and addiction.
- D) They primarily target the cholinergic system.

Answer: C) They have a low risk of dependence and addiction.

12. Which of the following is a potential side effect of sedative-hypnotic medications?

- A) Hypertension
- B) Hyperactivity
- C) Memory impairment
- D) Increased appetite

Answer: C) Memory impairment

13. Ramelteon is a medication used for the treatment of:

- A) Anxiety disorders
- B) Depression
- C) Narcolepsy
- D) Insomnia

Answer: D) Insomnia

14. Which of the following is an example of an antihistamine often used for its sedative properties?

- A) Lorazepam
- B) Zolpidem
- C) Diphenhydramine
- D) Melatonin

Answer: C) Diphenhydramine

15. Which sedative-hypnotic medication is commonly used for its anxiolytic properties in addition to its sedative effects?

- A) Zolpidem
- B) Lorazepam
- C) Ramelteon
- D) Melatonin

Answer: B) Lorazepam

16. Buspirone is a medication primarily used for the treatment of:

- A) Insomnia
- B) Anxiety disorders
- C) Depression
- D) Bipolar disorder

Answer: B) Anxiety disorders

17. Which of the following is a potential complication associated with the use of sedative-hypnotic medications in the elderly?

- A) Hypertension
- B) Hypokalemia
- C) Falls and fractures
- D) Hyperglycemia

Answer: C) Falls and fractures

18. Which of the following sedative-hypnotics is commonly used for pre-operative sedation?

- A) Melatonin
- B) Diphenhydramine
- C) Lorazepam
- D) Midazolam

Answer: D) Midazolam

19. Which of the following is a potential risk associated with the long-term use of sedative-hypnotic medications?

- A) Weight loss
- B) Tolerance and dependence
- C) Hypotension
- D) Increased energy levels

Answer: B) Tolerance and dependence

20. Which neurotransmitter system is primarily targeted by melatonin receptor agonists used for the treatment of insomnia?

- A) GABA
- B) Serotonin
- C) Dopamine
- D) Norepinephrine

Answer: B) Serotonin