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Course Name: D. Pharm

Year : Second Year

Subject Name : Pharmacology

Topic Name: Adrenergic drugs

C) Beta-1

D) Beta-2

Adrenergic drugs

1. Adrenergic receptors are primarily activated by which neurotransmitter? A) Acetylcholine B) Dopamine C) Norepinephrine D) Serotonin **Answer: C)** Norepinephrine 2. Which of the following is NOT a subtype of adrenergic receptors? A) Alpha-3 B) Beta-1 C) Beta-2 D) Beta-3 **Answer: A)** Alpha-3 **3.** Activation of beta-2 adrenergic receptors causes: A) Vasodilation B) Bronchodilation C) Decreased heart rate D) Pupil constriction **Answer: B)** Bronchodilation **4.** Adrenergic receptors are classified into how many main types? A) Two B) Three C) Four D) Five **Answer: B)** Three **5.** Selective activation of alpha-1 adrenergic receptors leads to: A) Vasodilation B) Bronchodilation C) Increased heart rate D) Pupil dilation **Answer: A)** Vasodilation **6.** Which adrenergic receptor subtype is primarily located in the heart? A) Alpha-1 B) Alpha-2

Answer: C) Beta-1 7. Which of the following is a non-selective adrenergic agonist? A) Albuterol B) Phenylephrine C) Isoproterenol D) Clonidine **Answer: C)** Isoproterenol **8.** Adrenergic antagonists are commonly used to treat: A) Hypertension B) Asthma C) Bradycardia D) Glaucoma **Answer: A)** Hypertension **9.** The primary mechanism of action of alpha-adrenergic blockers is: A) Stimulation of adrenergic receptors B) Inhibition of adrenergic receptors C) Inhibition of catecholamine synthesis D) Inhibition of catecholamine release **Answer: B)** Inhibition of adrenergic receptors **10.** Which adrenergic drug is commonly used as a nasal decongestant? A) Epinephrine B) Phenylephrine C) Isoproterenol D) Norepinephrine **Answer: B)** Phenylephrine **11.** The primary mechanism of action of beta-adrenergic antagonists is: A) Stimulation of adrenergic receptors B) Inhibition of adrenergic receptors C) Inhibition of catecholamine synthesis D) Inhibition of catecholamine release Answer: B) Inhibition of adrenergic receptors **12.** Which adrenergic drug is commonly used as a vasopressor in emergency situations? A) Isoproterenol B) Phenylephrine C) Dopamine

D) Norepinephrine

Answer: D) Norepinephrine

13. The drug dobutamine primarily acts on which adrenergic receptor subtype?
A) Alpha-1
B) Alpha-2
C) Beta-1
D) Beta-2
Answer: C) Beta-1
14. Which of the following adrenergic drugs is used to treat anaphylaxis?
A) Epinephrine
B) Phenylephrine
C) Isoproterenol
D) Norepinephrine
Answer: A) Epinephrine
15. The term "sympathomimetic" refers to drugs that:
A) Inhibit sympathetic nervous system activity
B) Mimic the action of the parasympathetic nervous system
C) Mimic the action of the sympathetic nervous system
D) Inhibit the action of the parasympathetic nervous system
Answer: C) Mimic the action of the sympathetic nervous system
16. Adrenergic drugs are contraindicated in patients with:
A) Hypertension
B) Asthma
C) Bradycardia
D) Glaucoma
Answer: C) Bradycardia
17. The drug epinephrine acts on which adrenergic receptors?
A) Alpha-1 and beta-1
B) Alpha-1 and beta-2
C) Alpha-2 and beta-1
D) Alpha-2 and beta-2
Answer: A) Alpha-1 and beta-1
18. Which adrenergic drug is commonly used as a bronchodilator in asthma?
A) Isoproterenol
B) Albuterol
C) Phenylephrine
D) Dobutamine
Answer: B) Albuterol

- 19. The drug phenylephrine primarily acts on which adrenergic receptor subtype?
 - A) Alpha-1
 - B) Alpha-2
 - C) Beta-1
 - D) Beta-2

Answer: A) Alpha-1

- **20.** The primary mechanism of action of alpha-adrenergic agonists is:
 - A) Stimulation of adrenergic receptors
 - B) Inhibition of adrenergic receptors
 - C) Inhibition of catecholamine synthesis
 - D) Inhibition of catecholamine release

Answer: A) Stimulation of adrenergic receptors