**B. Pharm 4th Semester Examination**

**Subject- Pharmacology-I (BP404T)**

 **Full Marks- 75 Time – 3 hours**

**Answer all the questions.**

**1. Multiple type questions (Answer all) (20 X 1= 20)**

(1) Acetylcholine is not used in clinical practice because

A) It is very toxic

B) The doses required are very high

C) It is very rapidly hydrolyzed

D) It is very costly

(2) β1 receptor is present in

A) Adipose tissue

B) Bronchi

C) Heart

D) All of the above

(3) Which of the following sympathomimetics acts indirectly ?

A) Epinephrine

B) Norepinephrine

C) Ephedrine

D) Methoxamine

(4) Antimuscarinics are used in the treatment of the following disorders except

A) Motion Sickness

B) Glaucoma

C) Hyperhidrosis

D) Asthma

(5) What is characteristic of the oral route ?

A) Fast onset of effect

 B) Absorption depends on GI tract secretion and motor function

C) A drug reaches the blood passing the liver

D) The sterilization of medicinal forms is obligatory

(6) Half life (t½) doesn’t depend on

A) Biotransformation

B) Time of Drug Absorption

C) Concentration of a drug in plasma

D) Rate of drug elimination

(7) The mechanism of atropine action is

 A) Competitive ganglion blockade

B) Competitive muscarinic blockade

C) Competitive neuromuscular blockade

D) Noncompetitive neuromuscular blockade

(8) \_\_\_\_\_\_\_\_\_\_ the substance which changes the activity of an effector element but doesn’t belong to second messengers

A) cAMP

B) cGMP

C) G-protein

D) Calcium ions

(9) The therapeutic index of a drug is a measure of its

A) Safety

B) Potency

C) Efficacy

D) Dose Variability

(10) Indicate the alpha2 selective agonist

A) Phentolamine

B) Dihydroergotamine

C) Clonidine

D) Labetalol

**Long Questions (Answer any two) (2X10= 20)**

1. Explain synthesis, storage, release, metabolism and pharmacological action of Serotonin?
2. Define drug distribution. Describe role of plasma proteins in drug distributution?
3. Write in detail process of development of new drug?

**Short Questions (Answer any seven) (7X5=35)**

1. Classify sedatives and hypnotics with examples. Explain the mechanism of action o barbiturates?
2. Write the mechanism of action of therapeutic uses of Atropine?
3. Classify neurotransmitters with examples and principle of working?
4. Define drug irritants. Classify it with examples?
5. What do you mean by dose response curve? Give its importance?
6. Describe drug synergism and antagonism?
7. Explain pharmacological action of histamine?
8. Explain the reason of Parkinsons disease. Explain the drugs used in this disease?
9. Explain molecular structure and signal transduction mechanism of ion channel linked receptor?

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