**PHA 308**

**NEUROPHARMACOLOGY**

**Mock test**

**Fill in the gaps with the most appropriate answer(s)**

1. The two barrier systems in the brain are blood brain barrier and blood csf barrier system
2. Neurotransmission processes are depolarizing the terminal membrane , activation of the voltage gated Ca2+ channel, CA2+ entry, change in the conformation of docking proteins, and fusion of the vesicle to the plasma membrane .
3. Glutamate NMDA and GABA receptor are examples of ionotropic receptors.
4. The inhibitory neurotransmitters Glycine and GABA opens Clˉ channels, resulting in post synaptic target hyperpolariztion .
5. The neurotransmitter which causes psychosis in excess and Alzheimer’s disease when lacking is acetylcholine.
6. The neurotransmitter which causes psychosis in excess and Parkinson’s disease when lacking is dopamine.
7. Tyrosine-derived neurotransmitters are Dopamine and Norepinephrine.
8. A disease characterized by an imbalance between dopaminergic and cholinergic system Parkinison’s disease.
9. Sedative is a drug that reduces excitement and produces calming effect without inducing sleep, while. Hypnotics is a drug that induces and/or maintains sleep.
10. Pharmacological actions of benzodiazepines include anticonvulsant, skeletal muscle relaxant, amnesic, sedative, hypnotic and (anti anxiety) anxiolytic.
11. The monoamine theory of depression states that…depression is caused by a functional deficit of the monoamine transmitters, noradrenaline and 5-hydroxytryptamine (5-HT) at certain sites in the brain…

**Indicate “TRUE/T” or “FALSE/F” in front of each statement contained in letter A-D**

12. Centrally acting drugs act via the following broad mechanisms

* 1. Transmitter-specific action (T)
  2. Neuron-specific action (T)
  3. Signal-specific action (F)
  4. All of the above (F)

13. These targets is/are of significance in the treatment of depression

* 1. Selective serotonin reuptake inhibitors. (T)
  2. Serotonin-noradrenaline reuptake inhibitors. (T)
  3. NMDA receptor antagonists. (F)
  4. Calcium channel blockers. (F)

14. Match the following antidepressants with their respective groups

a. Tricyclic antidepressant e.g. Amitriptyline. (T)

b. Irreversible monoamine oxidase inhibitor e.g. mianserin (F)

c. Monoamine receptor antagonist e.g. Phenelzine. (T)

d. Tricyclic antidepressant e.g. Imipramine. (T)

15. The differences between brain and peripheral capillary bed includes:

1. Brain capillaries have tight junctions while peripheral capillaries have fenestrated junctions. (T)
2. Brain capillaries have fenestrated junctions while peripheral capillaries have tight junctions. (F)