**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 **cerebrospinal fluid barrier**
2. Neurotransmission processes are **synthesis**  **packaging**  **release** **binding**  and **clearing**
3. **Glutamate NMDVA ,AMPA**  and **GABA receptors**  are examples of ionotropic receptors.
4. The inhibitory neurotransmitters **glycine** and **GABA** opens **cl**- and **k**+ channels, resulting in **Post or pre-synaptic target hyperpolarization**
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 **catecholamines** and **dopamine**
8. A disease characterized by an imbalance between dopaminergic and cholinergic system in the brain is **Parkinson’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 **sedation. Hypnotic. Anxiolytics. Anticonvulsant. Skeletal muscle relaxation. Amnesiac.**
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, while mania results from a functional excess.**:…………………………………………………

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

1. Centrally acting drugs act via the following broad mechanisms
2. Transmitter-specific action **T**
3. Neuron-specific action **T**
4. Signal-specific action **T**
5. All of the above **T**
6. These targets is/are of significance in the treatment of depression
7. Selective serotonin reuptake inhibitors **T**
8. Serotonin-noradrenaline reuptake inhibitors **T**
9. NMDA receptor antagonists **T**
10. Calcium channel blockers **F**
11. Match the following antidepressants with their respective groups
12. Tricyclic antidepressant e.g. amitriptyline **T**
13. Irreversible monoamine oxidase inhibitor e.g. mianserin **T**
14. Monoamine receptor antagonist e.g. phenelzine **F**
15. Tricyclic antidepressant e.g. imipramine **T**
16. The differences between brain and peripheral capillary bed includes:
17. Brain capillaries have tight junctions while peripheral capillaries have fenestrated junctions **T**
18. Brain capillaries have fenestrated junctions while peripheral capillaries have tight junctions **F**
19. Brain capillaries have fewer mitochondria than peripheral capillaries **F**
20. Brain capillaries have more mitochondria than peripheral capillaries **T**