**MLT 2nd**

**Course Title: General pharmacology I**

**Student Name: Muhammad Hussain**

**Student ID: 16251**

**Note:**

* **Paper is divided into two questions, Q1 includes 15 MCQs and Q2 includes 15 True/False statements**
* **Each MCQ or T/F carry one mark with grand total of 30 marks**
* **Highlight or underline the appropriate option**
* **Before marking, read every statement carefully to understand the actual sense of question**

**Q.1. Select and highlight appropriate option for given questions.**

1. In the process of metabolism introducing the polar functional group into molecule may \_\_\_\_\_\_\_\_\_\_\_\_ the pharmacological activity of drug

b. **Decrease**

1. Drugs having the properties of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ may have prolong half life

c. **Both a and b**

1. Rapid signal transmission and processing occur through

b. **Ligand- gated receptor**

1. Which of the following statement is not true

 a. **Mechanistically, every drug can illicit its action via enzymes, ion channels, transporters, receptors**

1. The therapeutic index represents an estimate of the\_\_\_\_\_\_\_\_\_\_ of a drug, because a very safe drug might be expected to have a very large toxic dose and a much smaller effective dose.

b. **Safety**

1. Which of the following statement is incorrect

 b. **In emergency Situation best choice of drug administration is I/M**

1. Signals to the skeletal muscles are controlled by

 c. **Nicotinic receptors**

1. Every drug follows same path/phases of metabolism such as

 d. **Depending upon chemical nature of drug**

1. Which of the following statement is the false one

 d. **If kidneys failed to eliminate then workload is eased by intestinal route.**

1. Degradative enzymes of GI tract cause drugs to denature which in turn lower its

 e. **All of the above**

1. Which receptor require preliminary formation of ligand bonding that lead to moveable complex

 b. **Ligand-gated ion channels**

1. A patient having certain type of infections showed altered \_\_\_\_\_\_\_\_\_\_\_\_\_\_

 d. **All of the above**

1. Drug distribution of any class of drug can be determined in terms of \_\_\_\_\_\_\_\_\_\_\_

e. **All of the above**

1. Which of the following statement is not related to exact principle of drug action

d. **Treatment cancer by giving them genetic therapy**

1. Which of the following directly alter membrane potential

c. **Ion- linked channels**

**Q.2**. **Select and highlight true and false for the given statements.**

1. Clinical pharmacology includes the investigation of drug’s efficacy and safety in various form of subjects.
* **True**
1. Drug X shows its action by releasing cholinergic neurotransmitter, due to large particulate nature its release will occur through endocytosis.
* **False**
1. Drug metabolism in humans usually results in a product that is more lipid soluble than the original drug.
* **False**
1. Various doses, dosage form and frequency is adjusted in pharmacotherapeutics.
* **True**
1. In passive diffusion, aqueous soluble drugs cannot move easily across cell membrane.
* **False**
1. A patient is administered with drug A started toxic reaction but that drug is slowly metabolized by enzymes, he/she should be treated with cimetidine to overcome toxicity.
* **True**
1. In enterohepatic circulation, reactivated metabolites comes from the metabolism via enzymes other than CYP P450.
* **True**
1. Drug A is hydrophobic in nature and having high plasma proteins binding are likely to distributed effectively to the target organ.
* **False**
1. A patient has some allergic reactions to the drug A, for avoiding any adverse reaction he administered Drug B with same desired properties, both of the drugs are therapeutically equivalent.
* **False**
1. Different dosage forms of same therapeutic class of drug will always effect the time to achieve peak plasma concentration.
* **True**
1. In case of drug action, preliminary bonding of drug with specified receptor will always lead to alteration of receptor’s structure.
* **True**
1. Mechanistically, every drug can illicit its action via enzymes, ion channels, transporters, receptors.
* **True**
1. As compared to other receptors, intracellular receptors take long for initiating its effect.
* **True**
1. Depending upon the nature of ligand, majority of drugs interact with receptors that are present across the cell membrane.
* **True**
1. Various subunits of second messenger system of G-proteins is always linked other receptors i.e. intracellular receptors, enzymes or ion linked channels.
* **True**