**DPT 4th**

**Course Title: Pharmacology I**

**Student Name:Brekhna**

**Student ID; 14508**

**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**

 **Q1. Select and highlight the most appropriate option for the following questions**

1. Which of the following statement is not true
2. Oral administration has lower chances of systemic infection
3. Activated charcoal easily advert the toxic effects occurred through oral route
4. Oral administration has comparatively good absorption
5. No specially trained personnel is required for oral administration
6. General anesthesia is characterized by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Revocable loss of senses and conscious
8. Temporary loss of memory
9. Reduced muscle contraction
10. All of the above
11. Which one of the following routes provides long term release of drugs/medicine
12. Subcutaneous
13. Intravascular
14. Sublingual
15. Intramuscular
16. All of given statements are correct, except
17. Active diffusion is the most common mechanism of absorption
18. Carrier saturation is always involved in active diffusion

 c.Active transportation involves the utility of adenosine triphosphate

 d.Specific proteins are require for carrying drug to the target

1. Bioavailability of insulin is negligible through oral administration because of
2. Instability in gastric pH
3. Degradation by stomach enzymes
4. First-pass hepatic metabolism
5. All of the above
6. Which stage of anesthesia is the most desired for any procedure
7. Stage I
8. Stage II
9. Stage III
10. Stage IV
11. Due to tight junction of capillaries in brain, only those drugs can be moved that are
12. Facilitated by carriers
13. Appropriately charged
14. Hydrophobic in nature
15. Both b. and c.
16. Both a. and c. ‘
17. In a healthy adult individual, aminoglycosides; with properties of low molecular weight and lyophobic nature, has the distribution of almost
18. 20%
19. 6%
20. 60%
21. None of the above
22. When the plasma concentration of drug reaches to 100 after 70, metabolism of drug turns from \_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
23. First order kinetics to zero order kinetics
24. Non-linear kinetics to linear kinetics
25. No effect on metabolism
26. Both a. and b.
27. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ receptors transduces signals from release of serotonin
28. Enzymatic-linked receptors
29. Ligand-gated receptors
30. G-protein coupled receptors
31. Intracellular receptors
32. By altering the dose of \_\_\_\_\_\_\_\_\_\_\_\_\_ in graded manner, it can be used as anesthetic, anxiolytic and sedative
33. Lidocaine
34. Diazepam
35. Phenytoin
36. Both a. and b.
37. None of the above
38. All the statements are correct, except
39. Hierarchical neuronal system has fast conducting fibers, because of neuron myelination
40. Functionally metabotropic receptor belongs to diffused neuronal system
41. Drugs that pharmacologically affects hierarchical/diffused system have greater effect on responsiveness and hunger etc.
42. None of the above
43. Therapeutic effect of morphine is mediated through activation of \_\_\_\_\_\_\_\_\_\_\_\_\_
44. Endorphin, dynorphin etc.
45. GABA receptors
46. Serotonin receptors
47. Both a. and b.
48. None of the above
49. Depending on subtype, all neurotransmitters can produce both excitation and inhibition of neuron, Except
50. Serotonin
51. Dopamine
52. Glutamic acid
53. None of the above
54. Which of the following drug have impact on patient weight
55. Phenobarbitone
56. Lorazepam
57. Valproic acid
58. Oxcarbazepine

Q2: For the following questions, highlight/underline True or False.

1. Respiratory and cardiovascular support must provide at anesthesia i.e. stage of medullary paralysis (True/False)
2. Hydrophobic drugs usually cannot move through passive diffusion (True/False)
3. If the bond length between drug and receptor is small than it will lead to strengthening of their interaction (True/False)
4. Drug solubility increases in diarrheal condition due to increase water content, hence increasing the absorption (True/False)
5. Generally, neuronal excitatory signal are transduced by opening of interconnected ion channels i.e. K+ ion channels (True/False)
6. Distal tubular reabsorption is very crucial to reabsorb vital nutrients that are eliminated from body (True/False)
7. Drugs that are bioequivalent can be switched with one another in time of need (True/False)
8. Reason of various stages of metabolism is that, hydrophobic drugs cannot be efficiently eliminated by kidneys (True/False)
9. In the anesthesia procedure, flumazenil is mostly used in premedication (True/False)
10. Carbamazepine as an inducing agent increase the biotransformation of drug that ultimately lead to low level of plasma concentration (True/False)
11. According to therapeutic uses, lignocaine can be used both as surface and injectable anesthetic (True/False)
12. Benzodiazepines and barbiturates illicit the response after binding between an α1 and the γ 2 subunit in GABA receptor (True/False)
13. Mostly phenytoin and sometimes Valproic acid exert its effects via inhibiting Na+ channels into rapidly firing neurons (True/False)
14. Status epilepticus the most serious, life-threatening condition characterized by convulsion and is generalized form of epilepsy (True/False)
15. Local anesthetics block the nerve impulse by blocking the ion channels at nerve terminals i.e. K+ channels (True/False)