**DPT 4th**

**Course Title: Pharmacology I**

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**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
19. Active transportation involves the utility of adenosine triphosphate
20. Specific proteins are require for carrying drug to the target
21. Bioavailability of insulin is negligible through oral administration because of
22. Instability in gastric pH
23. Degradation by stomach enzymes
24. First-pass hepatic metabolism
25. **All of the above**
26. Which stage of anesthesia is the most desired for any procedure
27. Stage I
28. **Stage II**
29. Stage III
30. Stage IV
31. Due to tight junction of capillaries in brain, only those drugs can be moved that are
32. Facilitated by carriers
33. Appropriately charged
34. Hydrophobic in nature
35. Both b. and c.
36. **Both a. and c. ‘**
37. In a healthy adult individual, aminoglycosides; with properties of low molecular weight and lyophobic nature, has the distribution of almost
38. **20%**
39. 6%
40. 60%
41. None of the above
42. When the plasma concentration of drug reaches to 100 after 70, metabolism of drug turns from \_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
43. **First order kinetics to zero order kinetics**
44. Non-linear kinetics to linear kinetics
45. No effect on metabolism
46. Both a. and b.
47. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ receptors transduces signals from release of serotonin
48. Enzymatic-linked receptors
49. Ligand-gated receptors
50. **G-protein coupled receptors**
51. Intracellular receptors
52. By altering the dose of \_\_\_\_\_\_\_\_\_\_\_\_\_ in graded manner, it can be used as anesthetic, anxiolytic and sedative
53. Lidocaine
54. Diazepam
55. Phenytoin
56. **Both a. and b.**
57. None of the above
58. All the statements are correct, except
59. Hierarchical neuronal system has fast conducting fibers, because of neuron myelination
60. **Functionally metabotropic receptor belongs to diffused neuronal system**
61. Drugs that pharmacologically affects hierarchical/diffused system have greater effect on responsiveness and hunger etc.
62. None of the above
63. Therapeutic effect of morphine is mediated through activation of ­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_
64. **Endorphin, dynorphin etc.**
65. GABA receptors
66. Serotonin receptors
67. Both a. and b.
68. None of the above
69. Depending on subtype, all neurotransmitters can produce both excitation and inhibition of neuron, Except
70. Serotonin
71. Dopamine
72. **Glutamic acid**
73. None of the above
74. Which of the following drug have impact on patient weight
75. Phenobarbitone
76. Lorazepam
77. **Valproic acid**
78. 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)