

**LPUNEST - Ph.D. Pharmacology  
(Sample Questions)**

**QUESTION 1** All of the following are general mechanisms of drug permeation except

- Option A Aqueous diffusion
- Option B Aqueous hydrolysis
- Option C Lipid diffusion
- Option D Pinocytosis

**QUESTION 2** Agonists affect the receptor molecule in the following manner

- Option A Alter its amino acid sequence
- Option B Denature the receptor protein
- Option C Alter its folding or alignment of subunits
- Option D Induce covalent bond formation

**QUESTION 3** Receptors perform the following functions

- Option A Ligand recognition
- Option B Signal transduction
- Option C Both ligand recognition and signal transduction
- Option D Disposal

**QUESTION 4** Which of the following receptor types have 7 helical membrane spanning amino acid segments with 3 extracellular and 3 intracellular loops?

- Option A Tyrosine protein kinase receptor
- Option B Gene expression regulating receptor
- Option C Intrinsic ion channel containing receptor
- Option D G protein coupled receptor

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**QUESTION 5**

Drug efficacy refers to

- Option A      The range of diseases in which the drug is beneficial
- Option B      The maximal intensity of response that can be produced by the drug
- Option C      The therapeutic dose range of the drug
- Option D      The therapeutic index of the drug