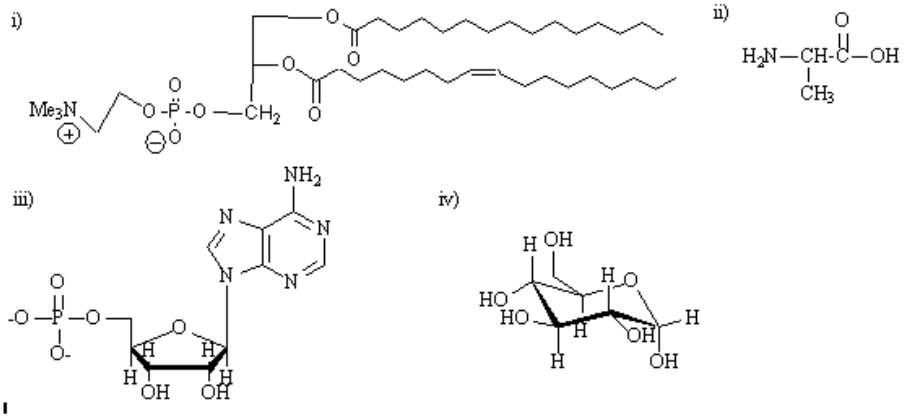
Chapter 01 - Drugs and drug targets: an overview

Test Bank

Type: multiple choice question
Title: Chapter 01 - Question 01
01) Which of the following molecules is a phospholipid?



Feedback: The 'phospho' of phospholipid indicates the presence of a phosphate group. The lipid part of the name refers to the two long hydrocarbon chains. The structure is also known as a phosphoglyceride. Structure ii) is an amino acid, structure iii) is an oligonucleotide, and structure iv is a carbohydrate.
***a.** i
b. ii
c. iii
d. iv

Type: multiple choice question
Title: Chapter 01 - Question 02
02) Which of the following statements is false regarding the phospholipid bilayer in cell membranes?
Feedback: The cell membrane is made up of a bilayer of phospholipid molecules where the hydrophobic tails interact with each other in the centre of the membrane by van der Waals interactions. The polar head groups interact with water at the outer and inner surfaces of the membrane.
The tails of the phospholipid molecules are hydrophobic (water hating) and repel water and ions. The phospholipid molecules are certainly fluid, but no pores are formed as a result of that.
a. It is made up of two layers of phospholipid molecules with the tails interacting with each other.
b. Water and ions are unable to cross the bilayer due to the hydrophobic tails of the phospholipid molecules.
c. There are charged groups at the inner and outer surfaces of the cell membrane.
***d.** The molecules in the bilayer are fluid and so the cell membrane is porous allowing the passage of ions and water across the cell membrane.

Type: multiple choice question
Title: Chapter 01 - Question 03
03) Which of the following statements is false?
Feedback: Some drugs do form covalent bonds to their targets, but most drugs interact by intermolecular binding interactions. The other statements are true. Most drug targets are large molecules (macromolecules) that are far bigger than the drugs that interact with them. There