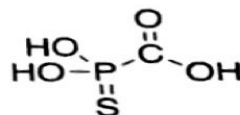


(7) This same drug (Q6)

- a) acts by blocking a  $H^+$  transport channel essential to flu virus replication
- b) is a prodrug
- c) is widely used in 2019 to combat flu outbreaks
- d) acts by inhibiting HIV reverse transcriptase

(8) This drug

- a) was patented as a novel structure (Claims)
- b) was patented as effective vs HIV (Claims)
- c) was synthesized at USC
- d) is an anti-viral drug called foscarnet



(9) A drug structure has 4 chiral centers. How many possible enantiomers?

- a) 2
- b) 4
- c) 8
- d) 16

10) Acyclovir works by

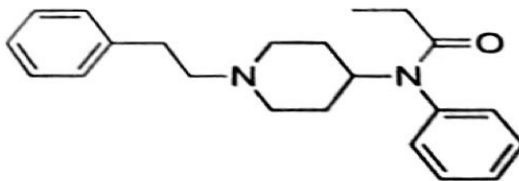
- a) mimicking a natural nucleoside, dG
- b) being converted to the triphosphate form
- c) being incorporated into viral DNA, where it terminates DNA synthesis
- d) all of the above

(11) Tamiflu

- a) is a prodrug of an active metabolite formed in the liver
- b) has no chiral centers
- c) is synthesized directly from standard lab reagents
- d) is not one of the drugs of concern with respect to water table contamination

(12) This drug is

- a) carfentanil
- b) fentanyl
- c) heroin
- d) methamphetamine



(13) Enantiomers of a compound

- a) are related as image and mirror image but are not superimposable
- b) have different chemical and physical properties
- c) can only have a single chiral center
- d) typically have the same or very similar biological activity