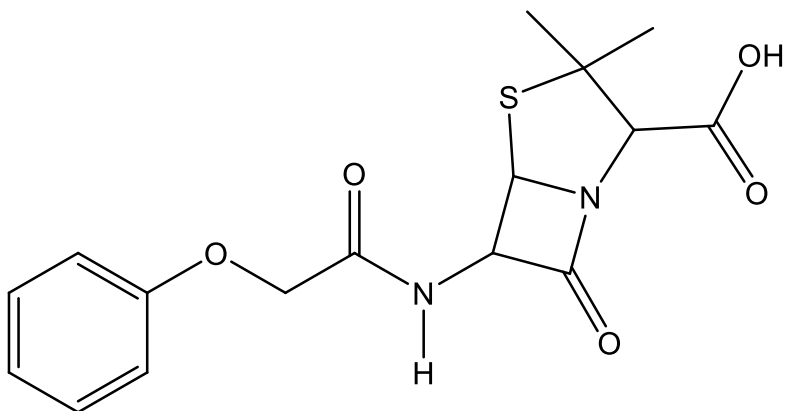


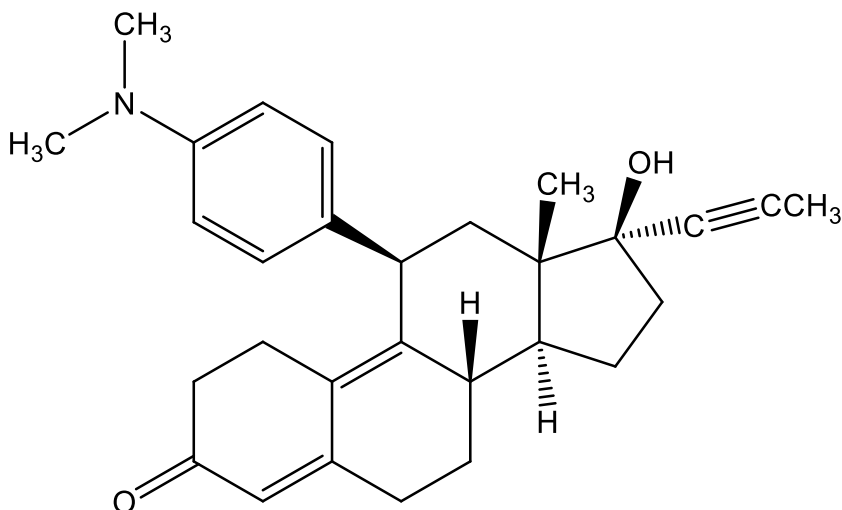
Exercise 3: - Functional groups

Circle and name the oxygen and/or nitrogen containing functional groups in the following compounds:

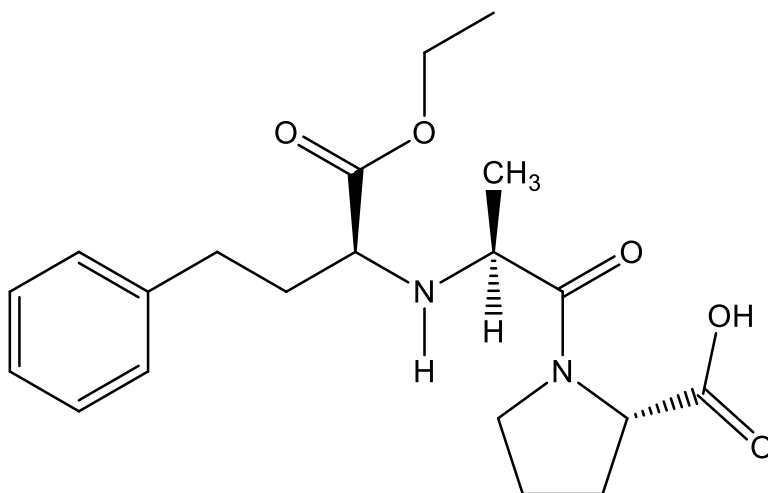
1. Penicillin-V



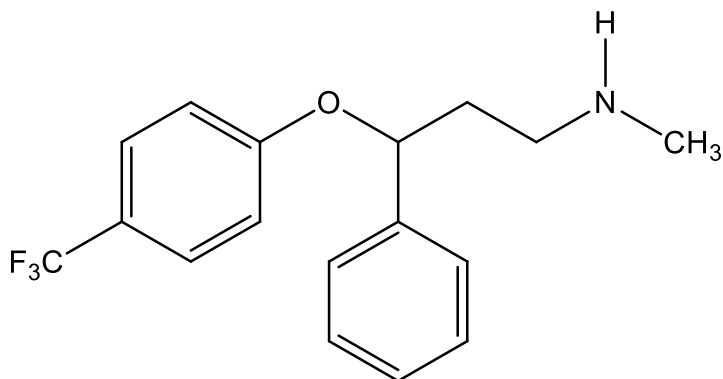
2. RU-486 is a synthetic steroid which blocks the effects of progesterone, a hormone which prepares the uterus for implantation of the fertilized egg. This steroid is a “morning after” pill.



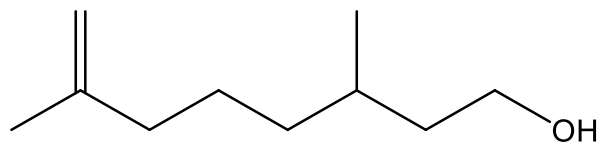
3. Enalapril – an antihypertensive



4. Fluoxetine – Prozac – an antidepressant



5. Consider the following structure of citronellol, a terpene found in oil of geranium:



- Circle and label an sp^3 hybridized carbon.
- Circle and label an sp^2 hybridized carbon.
- What is the hybridization state of the oxygen in this molecule.
- Name **two** functional groups present in this molecule.

6. Sucronic acid – which is 200,000 sweeter than sucrose.

