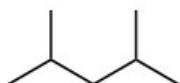




1

Arrange the given compounds in the order of INCREASING boiling point (from lowest bp to highest bp).



I

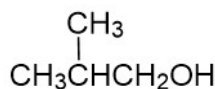


II

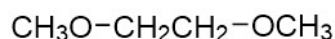


III

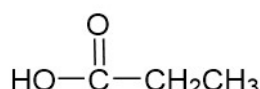
2



I



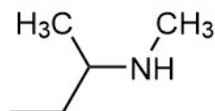
II



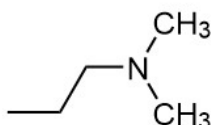
III

3

Which has the higher boiling point/bp (A, B or neither)?
Explain briefly.

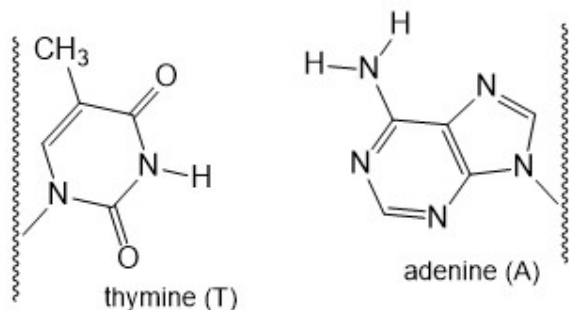


A

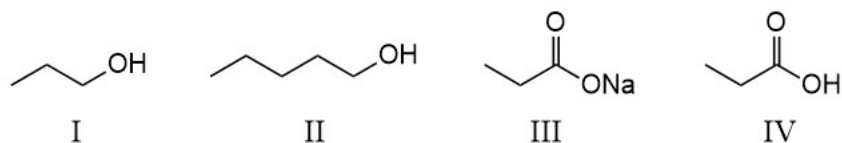


B

4 Demonstrate hydrogen-bonding in DNA base pairs:

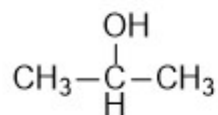


5 Arrange the given species in the order of INCREASING water solubility (from lowest to highest solubility).



6

Group work: Isopropanol has a higher molar mass and more hydrogen atoms than water, yet water has the higher boiling point. Explain, using drawings to support your answer.



isopropanol
bp 82.5°C

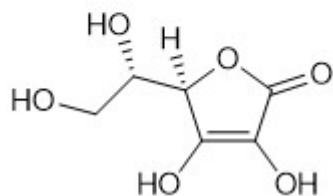


water
bp 100°C

7 Chapter 2 – Part 1 Worksheet

Shown below is the structures of ascorbic acid (vitamin C),
an antioxidant that protects against scurvy.

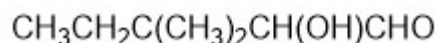
- Draw in any missing hydrogen atoms.
- What is the molecular formula of Vitamin C? Use format $C_xH_yO_z$.



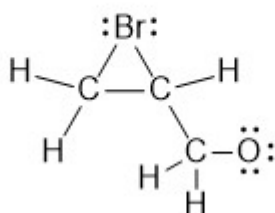
vitamin C formula: _____

9

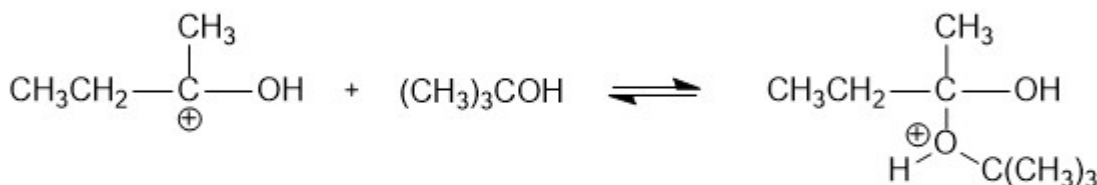
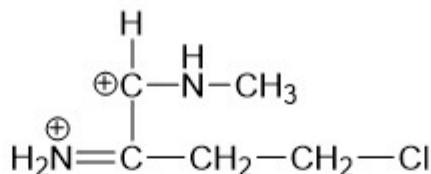
Draw expanded structure (draw all atoms),
given the following condensed formula, and
then provide a bond-line drawing.



8



- 10 Identify missing **lone pairs** (all formal charges are shown).



Redraw the reaction shown above, using line drawings:

After completing all of the above Lewis structures, **circle any atoms that are missing an octet.**

Next up: Chapter 2, Part 2 – *Resonance*