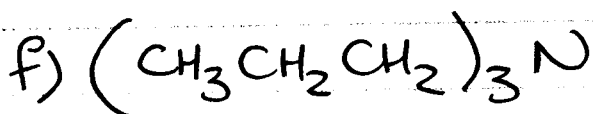
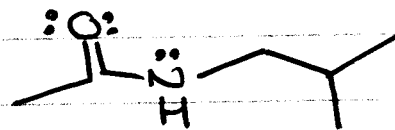
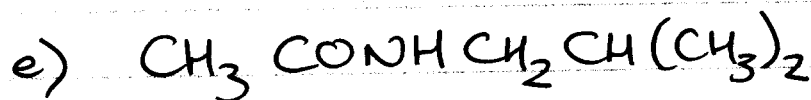
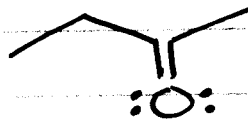
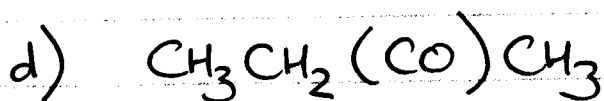
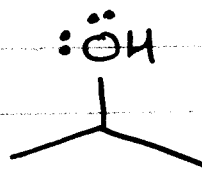
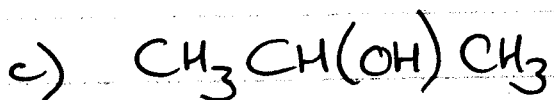
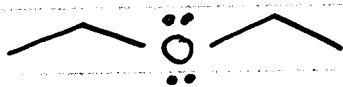
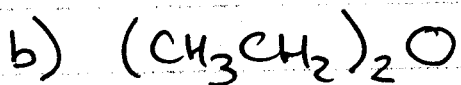
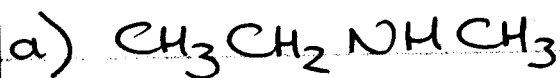


— ORGANIC STRUCTURES  
(CHEM 30A FALL 2004)

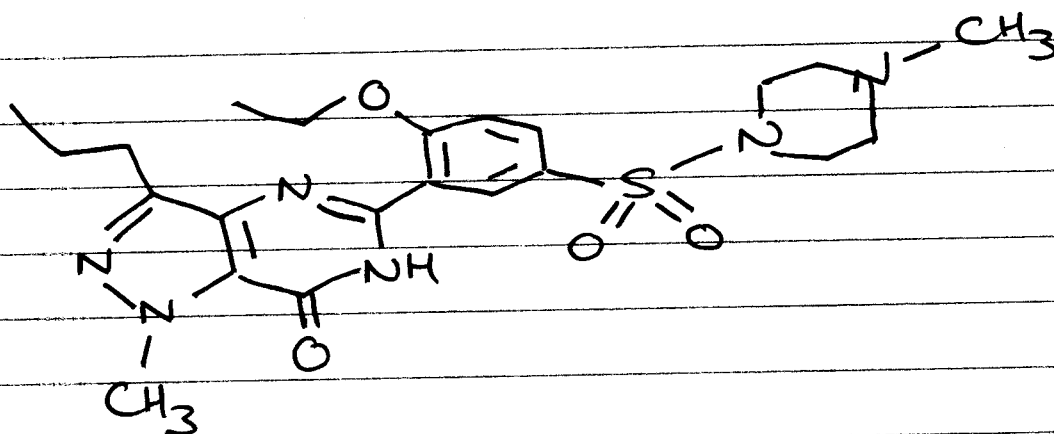
①

① Draw line formulae from the following condensed structures (include lone pairs)



2

② THE STRUCTURE BELOW IS CALLED SILDENAFIL, ANSWER THE FOLLOWING QUESTIONS



a) HOW MANY HYDROGEN ATOMS ARE THERE IN SILDENAFIL? (30)

b) HOW MANY NON-BONDED VALENCE ELECTRON PAIRS (LONE PAIRS) ARE THERE IN SILDENAFIL? (14)

c) HOW MANY ATOMS IN SILDENAFIL HAVE APPROXIMATELY (OR EXACTLY) TETRAHEDRAL GEOMETRIES? (17) INCLUDING THE S ATOM

d) HOW MANY CARBON ATOMS ARE THERE IN SILDENAFIL? (22)

e) SILDENAFIL HAS A MORE COMMON NAME AND IS ONE OF THE BIGGEST SELLING DRUGS TODAY - WHAT IS ITS OTHER NAME? (VIAGRA!)