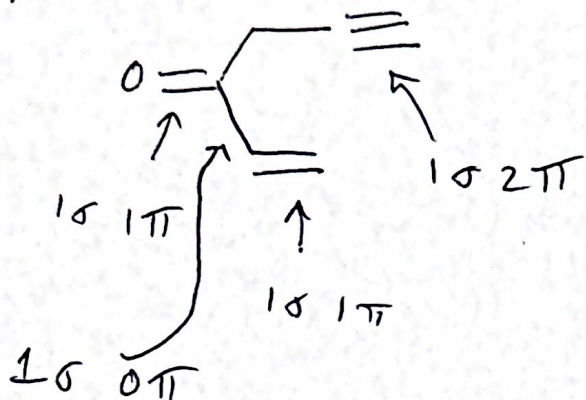


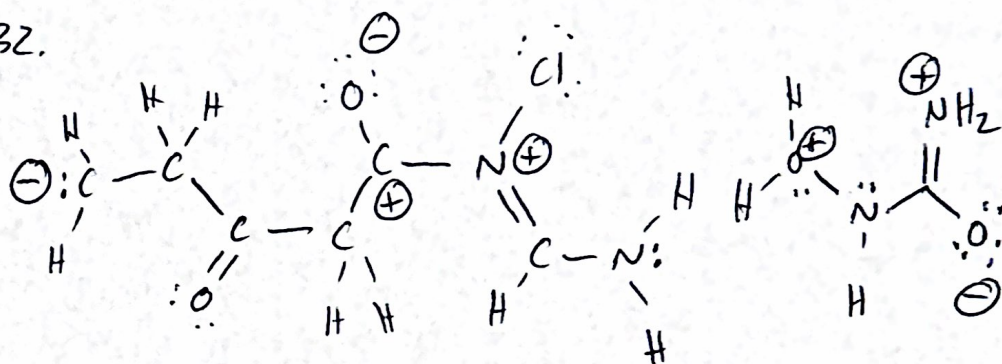
Chapter 2

30.

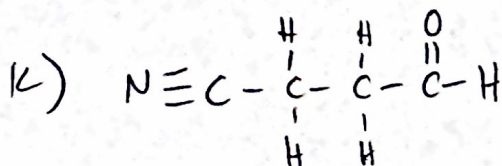
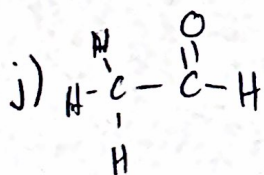
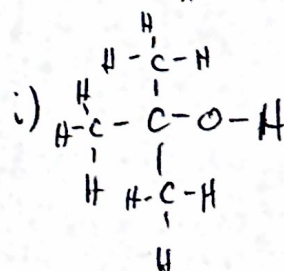
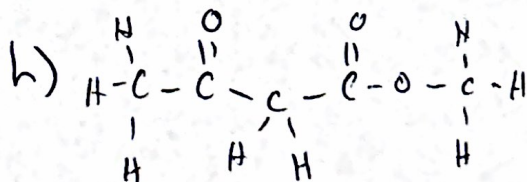
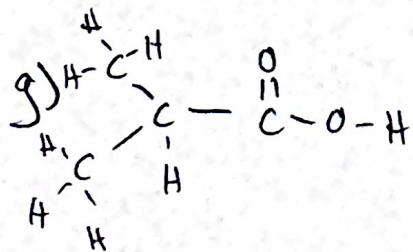
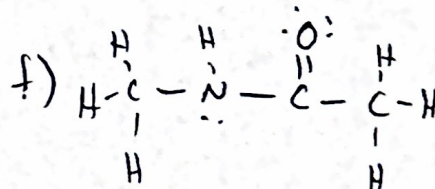
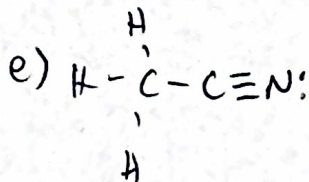
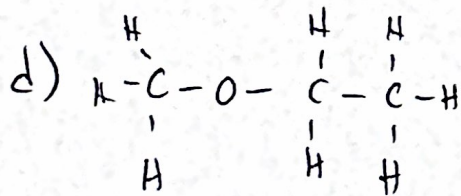
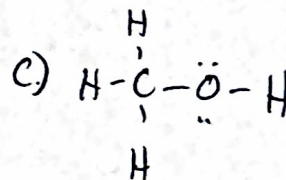
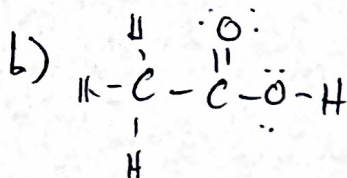
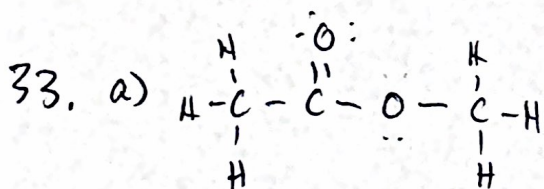


31. A ester
B amine
C ether
D alkene
E alcohol

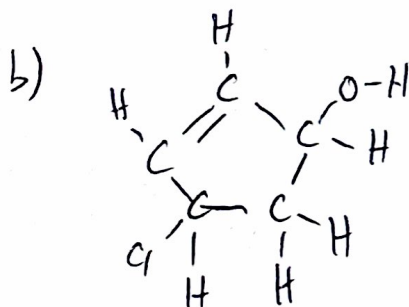
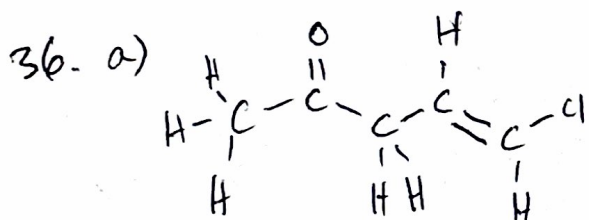
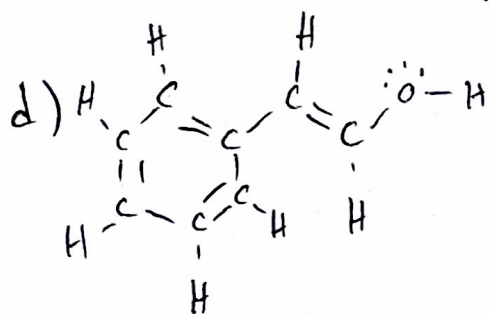
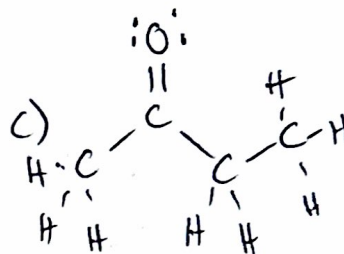
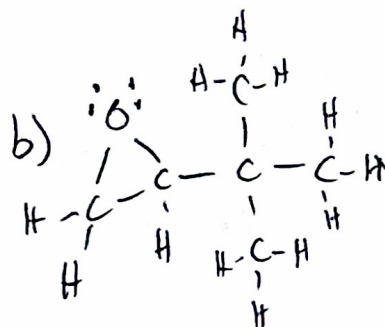
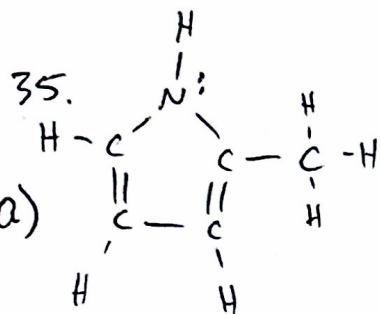
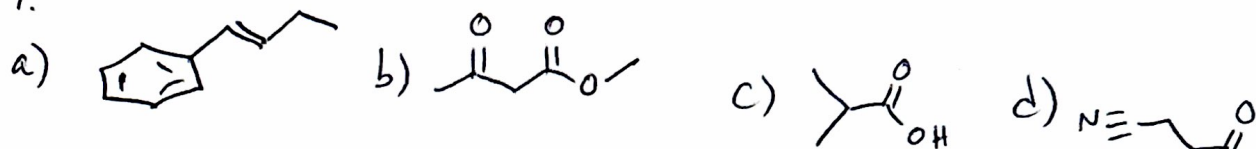
32.



The 1's are implied. $\oplus = +1$
 $\ominus = -1$



34.

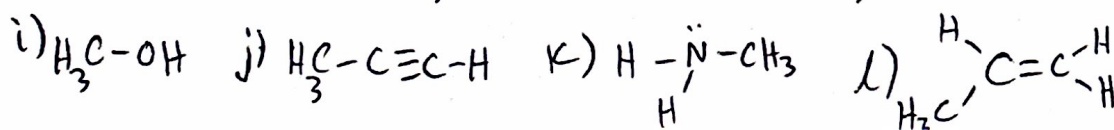
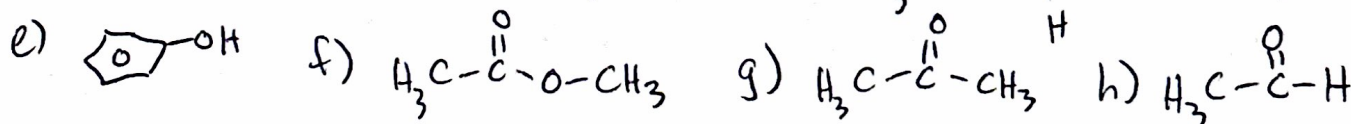
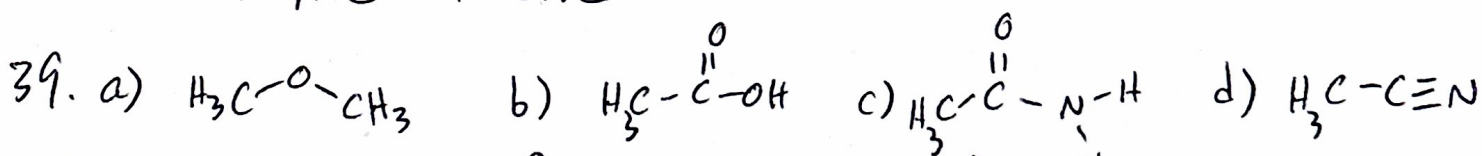


37. a) 1 b) 3 c) 4 d) 3 e) 0 f) 1 g) 1 h) 2

38. a) 3 pi 11 sigma

b) sp^2 120°

c) alkyne ketone



40. a) $C_{10}H_{18}O$ b) $C_{10}H_{8}O$ c) $C_{11}H_{24}$

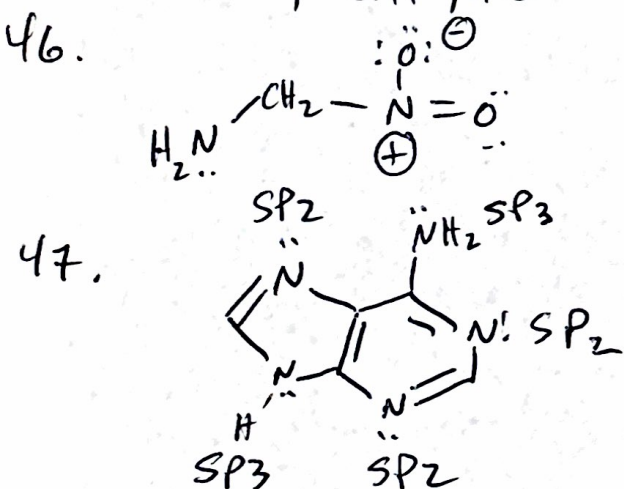
41. a) CH_4 b) C_4H_4O c) CCl_4 d) HI e) $C_2H_3Cl_3O$ f) CF_4

42. A amine
B ether
C alcohol
D Phenyl
E amide
F ester

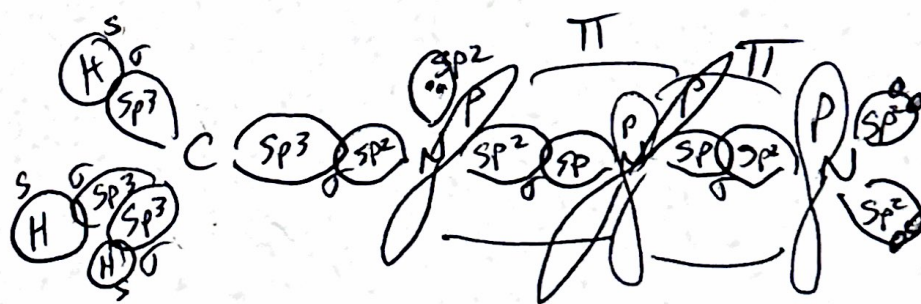
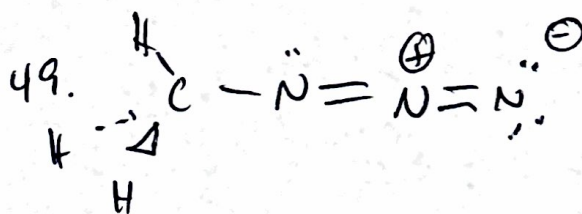
43. CH_3CH_2OH . It can hydrogen bond to water.

44. 4π 11σ

45. nitrile, alkyne



48. A amine
B amide
C thioether
D Phenol
E ketone
F ether
G alcohol
H alkene



50.



51. a) $\overset{+}{\text{C}} \rightarrow \text{O}$ b) $\overset{+}{\text{C}} \rightarrow \text{N}$ c) $\overset{+}{\text{C}} \rightarrow \text{Cl}$ d) $\overset{+}{\text{S}} \rightarrow \text{O}$ e) $\overset{+}{\text{C}} \rightarrow \text{F}$

52. a) sp^3 , tetrahedral, 109.5°
 b) sp^3 , bent, 109.5°
 c) sp^2 , TRIGONAL PLANAR, 120°
 d) sp , linear, 180°
 e) sp , linear, 180°

53. a)
 b. Polar NONPOLAR
- c. flip! Get The Same thing.

54. a)
 b)
 c)
 d)
 e)
 f)
 g)
 h)

55. a)
 ester
- b) $\text{H}-\text{C}\equiv\text{C}-\text{CH}_3$
 alkyne
- c)
 ketone
- d)
 Phenyl

