1. Give correct names or drawn the structure for the following compounds:
   (a) 2,3-dinitrotoluene

   ![Structure of 2,3-dinitrotoluene](image)

   (b) 

2. Which compound would you NOT expect to be aromatic?

   ![Structures of compounds I-V](image)

   I II III IV V

3. How many monochloronaphthalenes are possible?

4. In the molecular orbital model of cycloheptadienyl cation, how many pi-electrons are delocalized about the ring?

5. Compound M has molecular formula C₉H₁₂. The ¹H NMR spectra is given below. Propose a structure. The IR spectra has medium intensity peak at 1640 cm⁻¹ and a weak aromatic combination peaks between 1810-2200 cm⁻¹.