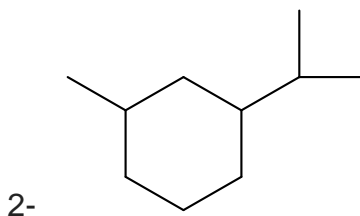
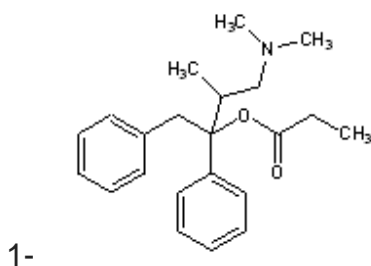
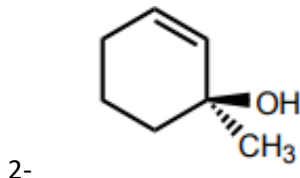
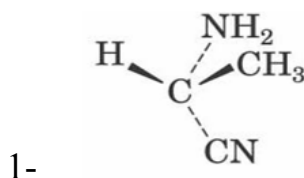


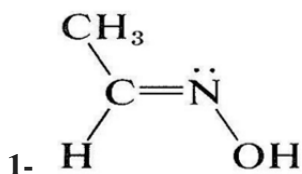
Q1) Mark the stereogenic carbons with a star. 5 marks



Q2) Label each asymmetric carbon in the compounds below as an R or S configuration. 10 marks



Q3) Classify these alkenes as cis, trans, or E, Z isomers. 10 marks



Q4) Answer briefly and show the reasons. 20 marks

- What are some common techniques used for resolution?
- How does stereospecificity differ from stereoselectivity?
- Can you change the configuration of a chiral center without breaking any bonds?
- How can you identify a compound as being prochiral?

Q5) Write the mechanism for the addition of Bromine to the cis-2-butene, and show the stereochemistry of the products. 5 marks