**COM 321: COMPILER DESIGN**

1. Explain the relevance of formal grammar and language to computer programming.
2. Enumerate the components that make up the syntax of grammars.
3. Discuss the major challenges to be faced in building compilers.
4. Explain the importance of translators in programming.
5. Distinguish between the function of loader and a linker.
6. Identify and explain the four components of a compiler.
7. Distinguish between the intermediate code generator and the code generator phase of the compiler.
8. Enumerate the functions performed by the lexical analyzer.
9. Define the following terms:- tokens, patterns, lexemes and attributes.
10. Construct an NFA to accept the string aa\*|bb\*.
11. Construct a deterministic finite automaton that will recognize all strings of 0's and 1's representing integers that are divisible by 3. Assume the empty string represents 0.