

**M.Tech.**

**COMPILER DESIGN**

**SUBJECT CODE : CS - 506**

**Paper ID : [E0686]**

[Note : Please fill subject code and paper ID on OMR]

**Time : 03 Hours**

**Maximum Marks : 100**

**Instruction to Candidates:**

- 1) Attempt any **Five** questions.
- 2) **All** questions carry equal marks.

**Q1)** What is a Compiler? How tools can help in compiler construction? Discuss the tools available for this purpose?

**Q2)** What is a Context Free Grammar? How does it define a language? How is it different from regular expressions?

**Q3)** Write notes on

- (a) Syntax and Semantics of a programming language.
- (b) Intermediate code generation.

**Q4)** What is a Lexical Analyzer? What is its role in program construction?

**Q5)** Differentiate between weakly typed and strongly typed languages. How a compiler handles typing checking and type conversions?

**Q6)** Discuss the process of code generation? Also elaborate on the problems faced in this process?

**Q7)** Discuss the techniques that can be used to reduce the size or running time of a program?

**Q8)** What is an error? What are the different types of errors? How a compiler handles errors in various phases.

