

ROLL NO:

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Total number of pages: ( 1 )

**M-Tech. -CSE/ 1<sup>st</sup> Sem**

## Advanced Programming Language

**Subject Code: CS-509**

Paper ID:

**Time allowed: 3 Hrs**

Max Marks: 100

### Important Instructions:

- Attempt any five questions
- All questions carry equal marks

- Q 1. What do you mean by programming paradigms? Explain various types of characteristics used in good programming languages?
- Q 2. Differentiate between the following?
  - a) Binding and Binding Time.
  - b) Translator and Simulator computers.
- Q 3. What are the major attributes for specifying data structures? Explain fixed and variable sized data structures in detail?
- Q 4. What are Co-routines? Explain Implicit and Explicit sequence control in detail?
- Q 5. What are various syntactic elements of a language? Explain various stages used in translation in detail?
- Q 6. What do you mean by Abstract data type? Differentiate between Encapsulation and Information hiding?
- Q 7.
  - a) What is Block structure? Differentiate between static and dynamic scope?
  - b) What is static storage management? Differentiate between stack based and heap based storage management?
- Q 8. Write a short note on the following terms
  - a) Problem in Syntax and Semantics.
  - b) Batch Processing Environment.
  - c) Recursive Subprogram.
  - d) Hardware and Firmware computers.