

Paper ID [CS509]

(Please fill this Paper ID in OMR Sheet)

M. Tech.

ADVANCED PROGRAMMING LANGUAGES (CS - 509)

Time : 03 Hours

Maximum Marks : 100

Instruction to Candidates:

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

- Q1)** (a) Explain the relationship between binding time and language implementation?
(b) Differentiate between type checking and type conversion with the help of suitable examples.
- Q2)** (a) What do you understand by exception handling? Explain.
(b) What are variable size data structures? Explain.
- Q3)** (a) What are generic subprograms? Explain with suitable example.
(b) What are generic abstract data types? Explain.
- Q4)** (a) What is implicit and explicit sequence control? Explain the disadvantages of statement labels and goto's.
(b) What are recursive subprograms and how they are implemented? Explain.
- Q5)** (a) What are associations and referencing environments? Explain.
(b) What do you understand by heap storage management? Explain.
- Q6)** (a) List and explain different stages in translation.
(b) What is implicit synchronization? Explain.
- Q7)** What are storage classes? Explain with examples each storage class.

Q8) Write a short note on any two of the followings:

(a) Static and dynamic scope

(b) Run Time Errors

(c) Software simulator