

Roll No.

Total Pages : 03

BT-3/D-23

43332

PROGRAMMING LANGUAGE

ES-CS-AIML-209A

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (i) Differentiate the working of interpreter and compiler with example. List the languages having interpreter and compiler. 8
- (ii) Write a short note on attribute grammar dynamic semantic. 7
2. (i) Explain the formal method of describing syntax. 7
- (ii) Write steps involved in implementing elementary data type with example. 8

Unit II

3. (i) Define coercion, type error and type checking. Explain the usage of these with example. 8

- (ii) Differentiate data hiding and encapsulation with suitable example. 7
4. (i) Define structured data type. Discuss various methods of implementing structured data type. 8
- (ii) Differentiate overloaded subprogram and generic subprogram. 7

Unit III

5. (i) What do you mean by Exception ? Discuss various methods to handle exceptions. 7
- (ii) Discuss the design issues of subprogram and its operations performed on them. 8
6. (i) Discuss static and dynamic scope in shared data. 8
- (ii) Elaborate, how is synchronization provided using semaphores. 7

Unit IV

7. (i) Discuss various phases in system controlled storage management. 7
- (ii) Compare C and C++ programming language with example. 8

8. (i) Differentiate procedural, functional and logical languages with example. 8
- (ii) Distinguish static storage management and heap storage management. 7

