

S.No. 28

17PCS04

(For the candidates admitted from 2017-2018 onwards)

M.Sc. DEGREE EXAMINATION, APRIL/MAY 2018.

First Semester

Computer Science

PRINCIPLES OF PROGRAMMING LANGUAGES

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Write a note on batch processing environments.

Or

- (b) What is syntax analysis? Explain.

2. (a) What are data types? Explain.

Or

- (b) Explain type conversion and coercion.

3. (a) What is data abstraction? Explain.

Or

(b) What is polymorphism? Explain.

4. (a) Write a note on programs as functions.

Or

(b) Explain the classification of different parts of statements in First-order predicate calculus.

5. (a) What is axiomatic semantics?

Or

(b) List down the facilities that must be provided by an operating system for parallel processing.

PART B — (5 × 10 = 50 marks)

Answer ALL questions.

6. (a) Discuss the syntactic elements of a language.

Or

(b) Discuss any two of the formal translation models.

7. (a) Explain the design and implementation of any two of the elementary data types.

Or

(b) Discuss the design and implementation of sets.

8. (a) Discuss encapsulation by subprograms.

Or

(b) Explain the main features of inheritance.

9. (a) Discuss the elements of ML.

Or

(b) What is lazy evaluation? Discuss.

10. (a) Discuss operational semantics.

Or

(b) Explain the three choices of constructs for parallel execution.