Roll No. | | | | | | | | | | |

ANNA UNIVERSITY (UNIVERSITY DEPARTMENTS)

B.E. (Full Time) - END SEMESTER EXAMINATIONS, APRIL / MAY 2025

Computer Science and Engineering

CS6302 & PROGRAMMING PARADIGMS

(Regulation 2018 - RUSA)

Time: 3 Hrs | Max. Marks: 100

CO1	Write programs related to syntax and semantics
CO2	Compare programs between C, Perl, and Smalltalk
CO3	Write programs using scripting languages
CO4	Demonstrate event-driven and concurrent programming using Prolog
CO5	Apply Prolog for developing distributed systems

BL – Bloom's Taxonomy Levels

(L1-Remembering, L2-Understanding, L3-Applying, L4-Analysing, L5-Evaluating, L6-Creating)

PART- A (10 x 2 = 20 Marks)

(Answer all Questions)

Q. No.	Questions	Marks	CO	BL
1.	Differentiate between compilation and interpretation.	2	1	3
2.	What are abstract data types?	2	1	2
3.	What is exception handling?	2	2	2
4.	What are partial functions?	2	2	3
5.	Why is a function declaration needed?	2	3	3
6.	What is the purpose of garbage collection?	2	3	2
7.	Mention the purpose of a constructor in object-oriented programming languages.	2	4	2
8.	Differentiate between declarative languages and imperative languages.	2	4	2
9.	What is meant by Functional Programming? Give an Example of a functional programming language.	2	5	3
10.	List out some of the scripting languages.	2	5	1

PART- B (8 x 8 = 64 Marks)

(Answer any EIGHT questions)

Q. No.	Questions	Marks	CO	BL
11.	Explain briefly the Programming language spectrum.	8	2	2
12.	Explain the Scope Rules with examples.	8	2	2

13.	Explain the Notion of Binding Time.	8	3	2
14.	Explain briefly about control flow and input/output statements with examples.	8	2	2
15.	Explain briefly the exception handling.	8	3	2
16.	Explain briefly the classification of data types.	8	3	2
17.	Describe briefly the various Parameter passing methods with examples.	8	2	3
18.	Write a short note on memory management and dynamic arrays.	8	3	2
19.	Why are C and ADA called Imperative programming languages? Explain with examples.	8	4	3
20.	Explain briefly the basic object-oriented programming concepts.	8	4	2
21.	Briefly explain the Concurrent Programming Fundamentals.	8	5	3
22.	Explain briefly the Interprocess communication.	8	5	2

PART- C (2 x 8 = 16 Marks)

Q. No.	Questions	Marks	CO	BL
23.	Explain how expressions, types, and functions are handled in functional programming.	8	3	2
24.	Explain briefly the subclasses within the declarative and imperative families.	8	2	3

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