15-06-2026 SE IT SEM-III C SCHEME PCPF QP CODE: 20014978

Time: 3 Hours **Marks: 80**

NB: 1. Question no. 1 is compulsory.
2. Answer any three out of the remaining questions.
3. Assume data, if missing, with justification.

Q. 1	(a)	What are the different programming paradigms?	**[05]**
	(b)	What are the different problem domains for scripting languages?	**[05]**
	(c)	Explain any 5 type classes in Haskell.	**[05]**
	(d)	What is encapsulation and abstraction? Explain with suitable example codes in c++ or Java	**[05]**
Q. 2	(a)	Explain lists in Haskell with suitable examples.	**[10]**
	(b)	Explain unification and resolution in logic programming with suitable examples	**[10]**
Q. 3	(a)	Differentiate between static and dynamic binding with suitable programming example	**[10]**
	(b)	Write a Haskell code to test if the input is palindrome. Also explain how to use :load command to run the program	**[05]**
	(c)	Explain how lists are used in Prolog with suitable example	**[05]**
Q. 4	(a)	What are the parameter passing methods? Explain each with suitable example.	**[10]**
	(b)	What is the need of backtracking in logic programming?	**[05]**
	(c)	What is the horn clause in predicate logic? Explain what are facts and rules in logic programming?	**[05]**
Q. 5	(a)	What is Inheritance? What are the different types of Inheritance? Explain with a suitable example.	**[10]**
	(b)	Write a note on Exception handling in detail.	**[10]**
Q. 6		**Write note on any 4**	**[20]**
	(a)	Lambda Function	
	(b)	Innovative features of scripting languages	
	(c)	Synchronisation in multi threading	
	(d)	Message Passing	
	(e)	Curried Functions	

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