	Pimpri Chinchwad Education Trust's **Pimpri Chinchwad College of Engineering** An Autonomous Institute (Permanently affiliated to Savitribai Phule Pune University)	SET – I SEMESTER – II

End Term Examination

First Year B. Tech. (Information Technology)

Principles of Programming Languages [ESC]

[BIT22B01]

Even Semester (2023-24)

Total No. of Questions-6 *Total No. of Printed Pages-2*

[Time: 2 Hr. 30 min.] *[Max. Marks: 80]*

PRN									

Instructions:

MP: Verify that you have received a question paper with correct course, code, branch etc.
i. All questions are compulsory.
ii. Assume suitable data wherever necessary.
iii. Neat labelled diagrams must be drawn wherever necessary.
iv. Figure to right indicates full marks.
v. Use of a non-programmable calculator is allowed.

		Marks
Q.1	**Attempt following.**	**[7M]**
A	Explain Procedural oriented programming paradigm with example.	**[4M]**
B	Explain Functional programming paradigm with example.	**[3M]**
Q.2	**Attempt following.**	**[7M]**
A	Illustrate the concept of type conversion with example.	**[4M]**
B	Explain primitive data types with example.	**[3M]**
Q.3	**Attempt any two .**	**[20M]**
A	Make use of iterative statements and structure to write a program in C to collect the information of five students like student name, roll number and percentage and display the same information.	**[10M]**
B	Develop a program in C to generate Fibonacci series of n numbers. (Take n as user input)	**[10M]**
C	How will you explain unconditional branching statements with syntax and example?	**[10M]**
Q.4		**[27M]**
A	**Attempt any two .**	**[20M]**
	I) Illustrate function with syntax and example also explain function types.	**[10M]**

	II)	Make a use of parameter passing call by value and call by reference to write a program in C to swap two numbers.	**[10M]**
	III)	Illustrate four categories of functions with its syntax and example.	**[10M]**
B	**Attempt any one**		**[7M]**
	I)	Explain semantics of call and return with stack and dynamic local variables.	**[7M]**
	II)	Develop a program in C using function to check number is Armstrong or not by accepting number from user.	**[7M]**
Q.5	**Attempt following**		**[2M]**
A	Develop a program in functional programming language to print your name.		**[2M]**
Q.6			**[17M]**
A	**Attempt any one**		**[10M]**
	I)	Elaborate basic concepts of object oriented programming language and explain class and object with example.	**[10M]**
	II)	Elaborate constructor and its types with syntax and example.	**[10M]**
B	**Attempt any one**		**[7M]**
	I)	Build a program in OOPs using class to display employee information like emp._id, emp_ name and emp._Salary.	**[7M]**
	II)	Create a program in OOPs using class and write function to return and display largest number out of two numbers.	**[7M]**

****** End of Question Paper******