

Total No. of Questions – [4]

Total No. of Printed Pages: [2]

PRN. No.	
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PAPER CODE	U114-302A (Backlog)
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DECEMBER 2024 (Backlog) EXAM Sem-I

F.Y.B.Tech (Common)

(PATTERN 2020)

COURSE NAME: FUNDAMENTAL OF PROGRAMMING**COURSE CODE: [CS10202A]****Time: [2Hr]****[Max. Marks: 60]****(*) Instructions to candidates:**

- 1) Use of scientific calculator is allowed
- 2) Use suitable data where ever required
- 3) All questions are compulsory. Solve any **THREE** sub questions from **EACH** question

Que. No.	Question Description	Max. Marks	CO mapped	BT Level
Q1.	Solve any three sub questions from the following			
	A) Compare 'for' and 'while' loop in C.	[5]	CO1	Analyze
	B) What is a one-dimensional array, and what is a two-dimensional array in programming? Give an example for each.	[5]	CO1	Understand
	C) What is the job of an assembler, compiler, and interpreter when a program is run? Explain how each of these helps make a program work.	[5]	CO1	Understand
	D) What are the different types of operators in the C programming language? Pick one type of operator and explain it with an example.	[5]	CO1	Apply
Q2.	Solve any three sub questions from the following			
	A) Identify the role of 'namespace' in C++ programing with one example.	[5]	CO2	Understand
	B) Compare 'local variable' and 'global variable' loop in C..	[5]	CO2	Analyze
	C) What is a recursive function in programming? Explain how it works with a simple example.	[5]	CO2	Understand
	D) Write a C++ program that adds two numbers using a function with no return type and no arguments.	[5]	CO2	Knowledge
Q3.	Solve any three sub questions from the following			
	A) Define class and object, data abstraction, encapsulation, inheritance and polymorphism.	[5]	CO3	Understand
	B) List the different types of access specifiers in a class and explain what each one does.	[5]	CO3	Knowledge
	C) Compare Object Oriented Programming (OOP) and Procedure Oriented Programming (POP) with example.	[5]	CO3	Analyze
	D) Define following terms:	[5]	CO3	Understand

	<ul style="list-style-type: none"> • Constructor • Default Constructor • Parameterized Constructor • Copy Constructor • Destructor 			
Q4.	Solve any three sub questions from the following			
	A) What is the role of inheritance in programming? List the different types of inheritance modes. Write a C++ program using 'public' inheritance and show the correct syntax and output.	[5]	CO4	Knowledge
	B) What is the role of a 'static function' in C++? Provide the correct syntax. Explain two advantages and two disadvantages of using static functions.	[5]	CO4	Understand
	C) Write a C++ program that demonstrates function overloading. Provide the correct syntax and show the output.	[5]	CO4	Remember
	D) Write a C++ program that demonstrates the use of a friend function. Provide the correct syntax and show the output.	[5]	CO4	Remember