Q.P. Code: 15321

# Third Semester B.C.A. Degree Examination, November/December 2019

(CBCS Scheme - Freshers & Repeaters)

### Computer Science

# Paper BCA 303 T - OBJECT ORIENTED PROGRAMMING USING C++

Time: 3 Hours

[Max. Marks: 70

Instructions to Candidates: Answer all Sections.

#### SECTION - A

Answer any **TEN** questions. Each question carries **2** marks: (10

 $(10 \times 2 = 20)$ 

- 1. Write any two differences between C and C++.
- 2. Define Token, Variable.
- 3. What is access specifiers? Mention its types.
- 4. Write the difference between calloc() and malloc().
- 5. What are actual and formal parameters?
- 6. Define class and object.
- 7. Define Destructor.
- 8. Define operator overloading.
- 9. What is Inheritance in C++?
- 10. Define this operator.
- 11. What is an Abstract Class?
- 12. What are input and output streams?

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# SECTION - B

	Ansv	wer any <b>FIVE</b> questions. Each question carries <b>10</b> marks : (5	× 10 = 50)
13.	(a)	Explain the basic concepts of OOPS.	(5)
	(b)	Explain the structure of C++ program.	(5)
14.	(a)	Explain the data types in C++.	(5)
	(b)	Write a short note on control structures.	(5)
15.	(a)	Explain recursion with an example.	(5)
	(b)	Explain friend function with example.	(5)
16.	(a)	Explain the types of constructors.	(5)
	(b)	Write a C++ program sort elements using bubble sort.	(5)
17.	(a)	Explain function overloading with example.	(5)
	(b)	Explain virtual function with an example.	(5)
18.	(a)	Explain any three types of Inheritance.	(5)
	(b)	Explain Polymorphism with an example.	(5)
19.	(a)	Explain exception handling in C++.	(5)
	(b)	Write a C++ program to calculate area and circumference of cinline function.	ircle using (5)
20.	(a)	Write short note on storage classes with example.	(5)
	(b)	Write short note on Pointers with example.	(5)