Reg. No	
SECOND SEMESTER B.C.A. DEGREE EXAMINATION, APRIL 2018	
(Supplementary/Improvement)	
(CUCBCSS – UG)	2 WITH C ⁺⁺
CC15U BCA2 B02 – OBJECT ORIENTED PROGRAMMING (Core Course: Computer Application)	SWIIHC
(2015, 2016 Admissions)	
Time: Three Hours	Maximum: 80 Marks
PART A	
Answer <i>all</i> questions. Each question carries 1 mark.	
1. The wrapping up of data and member functions together is called	
2. How many types of polymorphisms are supported by C^{++} ?	
3. cout stands for	
4. Evaluate !(1 && !(0 1)).	
5. Destructor has the same name as constructor and it is preceded by _	
6. What is a reference variable in C ⁺⁺ ?	
7. What is a friend function?	
8. Define copy constructor.	
9. What is the role of protected access specifier in C ⁺⁺ ?	
10. What is a function template?	
	(10 x 1=10 Marks)
PART B	
Answer all questions. Each question carries 2 marks.	
11. Explain the use of <i>this</i> pointer using a suitable example.	
12. Write short note on C ⁺⁺ storage class.	
13. Explain any two methods of passing arrays to functions.	
14. What is a virtual function? Give an application of it.	
15. What are the operators used for dynamic memory management?	
	$(5 \times 2 - 10 \text{ Marks})$

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PART C

Answer any *five* questions. Each question carries 4 marks.

- 16. What are the differences between pointers and reference variables?
- 17. Explain various operators in C⁺⁺ with suitable examples.
- 18. What is the advantage of abstract class? Give an example.
- 19. Differentiate between structure and class.
- 20. Write any C⁺⁺ program to explain the concept of parameterized constructor.
- 21. Differentiate between ios::app and ios::in
- 22. What is the use of seekg() in file handling?
- 23. What do you mean by early binding and late binding?

 $(5 \times 4 = 20 \text{ Marks})$

PART D

Answer any *five* questions. Each question carries 8 marks.

- 24. What are the major differences between Object Oriented Programming and Procedural Programming? Explain various features of Object Oriented Programming?
- 25. Explain various decision making and looping statements in C⁺⁺ with suitable examples?
- 26. What do you mean by inheritance? Explain in detail, different types of inheritance.
- 27. Explain operator overloading with suitable example. Give the list of operators which can be as well as cannot be overloaded.
- 28. What do you mean by polymorphism? Explain different types of polymorphism.
- 29. What are exceptions? How these exceptions are handled in C⁺⁺?
- 30. Write a C⁺⁺ program to calculate the average marks scored in three subjects by three students. Use initialized and uninitialized arrays of objects.
- 31. Define the concept of iostreams provided in C⁺⁺? Explain in detail, stream class hierarchy.

 $(5 \times 8 = 40 \text{ Marks})$
