Reg. No.:.... (6 pages) Code No.: 21018 Sub. Code: GMCA 21 B.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2016. Second Semester Computer Applications - Main OBJECT ORIENTED PROGRAMMING C++ (For those who joined in July 2012 onwards) Maximum: 75 marks Time: Three hours PART A — $(10 \times 1 = 10 \text{ marks})$ Answer ALL questions. Choose the correct answer: The C++ programs are stored in the extension of (b) .Cpp (a) .C

(d) .Cplus

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2.		insulation of data		direct access by the	
	(a)	abstraction	(b)	encapsulation	
	(c)	data hiding	(d)	none	
3.	The default arguments must start with the symbol				
	(a)	::	(b)	#	
	(c)	=	(d)	@	
4.	A ———— is a run time entity				
	(a)	class	(b)	object	
	(c)	structure	(d)	union	
5.	Which operator can be overloaded?				
	(a)	Subscripting	(b)	Dereferencing	
	(c)	Arithmetic	(d)	All of these	
6.	Which operator has the highest precedence?				
	(a)		(b)	+	

(d) ?

(c)

7.	The inheritance is default by					
	(a)	public	(b)	protected		
	(c)	private	(d)	none		
8.	While declaring pointer variable it should start with the symbol					
	(a)	&	(b)	*		
	(c)	->* ·	(d)	*		
9.	function reads single character from a					
	file					
	(a)	get	(b)	gec		
	(c)	getchar	(d)	getch		
10.	The function handle the data in binary					
	form					
	(a)	get	(b)	gec		
	(c)	getchar	(d)	read		
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PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

What are the benefits of OOP?

Or

- (b) Differentiate procedure oriented programming and object oriented programming.
- Compare class and structures. 12.

Or

- How to specify a class?
- 13. (a) Define operator overloading. Mention which operators that cannot be overloaded.

Or

- Write a C++ program to overload the operator '++'.
- What is meant by nesting of classes? 14. (a)

Or

Write short note on pure virtual functions.

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[P.T.O.]

15. (a) Discuss the functions for manipulation of file pointers.

Or

(b) List out the errors during file operations.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Write a C++ program to find the roots of a quadratic equation.

Or

- (b) Write a C++ program to check whether the given number is prime or not.
- 17. (a) Explain the concept of static member functions.

Or

- (b) Write a C++ program to illustrate default arguments.
- 18. (a) How to manipulation of strings using operators? Explain.

Or

(b) Write a C++ program to overload the operator '<<'.

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19. (a) What is runtime polymorphism? Explain.

Or

- (b) Describe various arithmetic operations on pointers.
- 20. (a) Write a C++ program to imitate dos copy command using command line arguments.

Or

(b) Explain various output operation on file.

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