

Enrollment No.....



Faculty of Science
End Sem (Even) Examination May-2018
CA3CO05 Object Oriented Programming

Programme: BCA Branch/Specialisation: Computer Application

Duration: 3 Hrs.

Maximum Marks: 60

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1
- i. Following is not a feature of object oriented programming: 1
 - (a) Encapsulation
 - (b) Abstraction
 - (c) Linking
 - (d) Polymorphism
 - ii. Compiler generates: 1
 - (a) Executable code
 - (b) Object code
 - (c) Both (a) and (b)
 - (d) None of these
 - iii. Identify the user-defined types from the following? 1
 - (a) Enumeration
 - (b) Classes
 - (c) Both (a) and (b)
 - (d) int
 - iv. Which looping process is best used when the number of iterations is known? 1
 - (a) For
 - (b) While
 - (c) Do-while
 - (d) All looping processes require that the iterations be known
 - v. In which of the parameter passing technique, address of variable is passed? 1
 - (a) Call by value
 - (b) Call by reference
 - (c) Both (a) and (b)
 - (d) None of these
 - vi. What are mandatory parts in function declaration? 1
 - (a) Return type, function name
 - (b) Return type, function name, parameters
 - (c) Parameters, function name
 - (d) None of these

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- vii. Which of the following is used to initialize an object? **1**
(a) Arrays (b) Constructor (c) Destructor (d) None of these
- viii. What does inheritance allow you to do? **1**
(a) Create a class (b) Create a hierarchy of classes
(c) Access methods (d) None of these
- ix. A direct access file is: **1**
(a) A file in which records are arranged in a way they are inserted in a file
(b) File in which records are arranged in a particular order
(c) Files which are stored on a direct access storage medium
(d) None of these
- x. Which keyword is used to check exception in the block of code? **1**
(a) Catch (b) Throw (c) Try (d) None of these
- Q.2 i. Differentiate between static and dynamic binding. **2**
ii. Compare and contrast the structured and object-oriented programming paradigms. **3**
iii. What are the features of object-oriented programming? Explain it in detail. **5**
- OR iv. When do we declare a member of a class static? What are the characteristics of static members of a class? **5**
- Q.3 i. Explain different data types with proper classification diagram. **4**
ii. Write in detail various control structures. **6**
- OR iii. Explain memory referencing operators in detail with example. **6**
- Q.4 i. What do you understand by friend function? **3**
ii. What is a constructor? Can there be more than one constructor for a class? Justify. **7**
- OR iii. What are member functions? Differentiate between call by value and call by reference with example. **7**
- Q.5 i. How code reusability is achieved in OOPs? Explain in details. **4**
ii. Explain the concept of overloading? Differentiate between function and operator overloading. **6**

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- OR iii. Discuss about the different types of inheritance in C++ with suitable example. **6**
- Q.6 Attempt any two:
- i. Explain different types of file mode. **5**
- ii. Explain exception handling in detail. List any four standard exceptions. **5**
- iii. What are input and output streams? What is the significance of fstream.h file? **5**

Marking Scheme

CA3CO05 Object Oriented Programming

Q.1	i. Following is not a feature of object oriented programming: (c) Linking	1			
	ii. Compiler generates: (b) Object code	1			
	iii. Identify the user-defined types from the following? (c) Both (a) and (b)	1			
	iv. Which looping process is best used when the number of iterations is known? (a) For	1			
	v. In which of the parameter passing technique, address of variable is passed? (d) None of these	1			
	vi. What are mandatory parts in function declaration? (a) Return type, function name	1			
	vii. Which of the following is used to initialize an object? (b) Constructor	1			
	viii. What does inheritance allow you to do? (b) Create a hierarchy of classes	1			
	ix. A direct access file is: (c) Files which are stored on a direct access storage medium	1			
	x. Which keyword is used to check exception in the block of code? (c) Try	1			
Q.2	i. Differentiate between static and dynamic binding. (1 mark each)	2			
	ii. Compare and contrast the structured and object-oriented programming paradigms. (any three differences) 1 mark each (1 mark * 3)	3			
	iii. Features of object-oriented programming (five features) 1 mark each (1 mark * 5)	5			
OR	iv. A member of a class static Characteristics of static members of a class	2 marks 3 marks	5		
Q.3	i. Different data types with proper classification diagram.	4			
	ii. Three control structures 2 marks each (2 marks *3)	6			
OR	iii. Memory referencing operators in detail with example.			6	
Q.4	i. Friend function			3	
	ii. Constructor Can there be more than one constructor for a class	2 marks 5 marks		7	
OR	iii. Member functions Differentiate between call by value and call by reference	2 marks 5 marks		7	
Q.5	i. Code reusability is achieved in OOPs			4	
	ii. Concept of overloading Differentiate between function and operator overloading.	2 marks 4 marks		6	
OR	iii. At least 4 types of inheritance in C++ with suitable example. 1.5 marks each (1.5 marks *4)			6	
Q.6	Attempt any two:				
	i. At least 3 types of file mode.			5	
	ii. Explain exception handling in detail. List any four standard exceptions.			5	
	iii. Input and output streams Significance of fstream.h file	2 marks 3 marks		5	
