

Enrollment No.....



Faculty of Science
End Sem (Odd) Examination Dec-2018
BC3SE01 OOP using C++

Programme: B.Sc. (CS) Branch/Specialisation: Computer Science

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. C++ language was invented by **1**
(a) Bjarne Stroustrup (b) Dennis Ritchie
(c) Ken Thompson (d) None of these
- ii. Pick out the definition of objects **1**
(a) Member of the class (b) Instance of the class
(c) Associate of the class (d) Attribute of the class
- iii. Which of the data type is used to represent the absence of parameters? **1**
(a) Int (b) Short (c) Void (d) Float
- iv. The new and delete are: - **1**
(a) Operators (b) Keywords
(c) Both (a) and (b) (d) None of these
- v. Which of the following is used to terminate the function declaration? **1**
(a) : (b)) (c) ; (d) None of these
- vi. The destructor is executed when: - **1**
(a) Object goes out of scope
(b) When object is not used
(c) When object contain nothing
(d) None of these
- vii. When the inheritance is private, the private method in base class are **1**
.....in the derived class.
(a) Inaccessible (b) Accessible
(c) Protected (d) Public
- viii. Dynamic binding is done using the keyword: - **1**
(a) New (b) Virtual (c) Inline (d) Void

- ix. The eof() stands for: **1**
(a) End of file (b) Error opening file
(c) Error of file (d) None of these
- x. Pick out the correct answer: **1**
(a) Exception are not suitable for critical points in code
(b) Exception are suitable for critical points in code
(c) Both (a) and (b)
(d) None of these
- Q.2 i. What do you mean by message passing? **2**
ii. Explain any three applications of OOP's. **3**
iii. Define working of compiler and linker. **5**
- OR iv. Explain the key concept of OOP's. **5**
- Q.3 i. How it is possible the use of comma operator in place of semi-colon. **4**
ii. Explain if...else and write a program to execute if without any expression. **6**
- OR iii. Write a program to display alphabets from A-Z using for loop. **6**
- Q.4 i. Define static data member & static member function. **3**
ii. What do you mean by constructor and its types explain with example. **7**
- OR iii. Define function with inline and friend function with example. **7**
- Q.5 i. Define abstract class. **2**
ii. How does inheritance promote reusability? **3**
iii. What is polymorphism? Discuss run time polymorphism. **5**
- OR iv. Write a program to overload binary + operator. **5**
- Q.6 Attempt any two: **5**
i. Write exception handling with example. **5**
ii. What is a file in C++? Explain the various type of file mode in C++. **5**
iii. Write a program to copy contents of one file to another file using command line arguments. **5**

Marking Scheme
BC3SE01 OOP using C++

Q.1	i. C++ language was invented by (a) Bjarne Stroustrup	1		
	ii. Pick out the definition of objects (b) Instance of the class	1		
	iii. Which of the data type is used to represent the absence of parameters? (c) Void	1		
	iv. The new and delete are: - (c) Both (a) and (b)	1		
	v. Which of the following is used to terminate the function declaration? (c) ;	1		
	vi. The destructor is executed when: - (a) Object goes out of scope	1		
	vii. When the inheritance is private, the private method in base class arein the derived class. (a) Inaccessible	1		
	viii. Dynamic binding is done using the keyword: - (b) Virtual	1		
	ix. The eof() stands for: (a) End of file	1		
	x. Pick out the correct answer: (a) Exception are not suitable for critical points in code	1		
Q.2	i. Definition of message passing	2		
	ii. Any three applications of OOP's.1 mark for each (1 mark *3)	3		
	iii. Definition of compiler and linker 1 mark for each (1 mark *2) 2 marks Working of compiler and linker. 1.5 mark for each (1.5 mark *2) 3 marks	5		
OR	iv. At least five key concepts of OOP's. 1 mark for each (1 mark *5)	5		
Q.3	i. Use of comma operator in place of semi-colon Explanation 3 marks Example 1 mark	4		
	ii. if.... else explanation 3 marks Program to execute 3 marks	6		
OR	iii. Program to display alphabets from A-Z using for loop. Declaration 2 marks Logic 3 marks Output 1 mark	6		
Q.4	i. Static data member 1.5 marks Static member function. 1.5 marks	3		
	ii. Definition of constructor 1 mark Its types with example 2 marks for each type (2 marks * 3) 6 marks	7		
OR	iii. Definition of function 1 mark With inline 2 marks With friend function 2 marks With example. 2 marks	7		
Q.5	i. Definition of abstract class. 2	2		
	ii. Explanation of inheritance promote reusability 3	3		
	iii. Polymorphism 2 marks Run time polymorphism 2 marks Example 1 mark	5		
OR	iv. Program to overload binary + operator Step Wise marking	5		
Q.6	Attempt any two:			
	i. Exception handling 3 marks Example. 2 marks	5		
	ii. Definition of file in C++ 1 mark Type of file mode in C++ 0.5 mark for each (0.5 mark * 8) 4 marks	5		
	iii. Program to copy contents of one file to another file using command line arguments Step Wise marking	5		
