

**B.SC. (A & G) SEM. – II (OLD COURSE)(ANIMATION &
GAMING) : WINTER - 2017
SUBJECT : OOP USING C ++**

Day : **Friday**
Date : **22/12/2017**

Time : **02.30 PM TO 04.30 PM**
Max. Marks : **40**

W-2017-0901

N. B. :

- 1) Attempt **Any FIVE** questions.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat diagram **WHEREVER** necessary.
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- Q.1** Describe the following OOP concepts, in detail, with appropriate examples in C ++ : (08)
- a) Abstraction
 - b) Polymorphism
 - c) Encapsulation
 - d) Inheritance
- Q.2** Explain the necessity of constructors and destructors in C ++? Also explain the concept of copy constructor, along with code snippet example. (08)
- Q.3** Explain the following concepts, using C ++ code snippet examples : (08)
- a) Virtual base class
 - b) Class templates
- Q.4** Differentiate between 'private' and 'protected' visibility specifiers? Describe using C ++ code snippet example, for each specifier? (08)
- Q.5** Describe the concept of scope resolution and Membership operator in C ++? Elaborate using code snippet examples. (08)
- Q.6** Describe the concept and necessity of friend function in C ++? Elaborate using code snippet example? (08)
- Q.7** Write a C ++ program which overloads function calculate_score (), with varying number of arguments for various subject marks, and returns the average percentage and prints it on screen. (08)

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