

University of Sargodha

M. Sc. I. T, 2nd Term Exam 2014.

Subject: Information Technology

Paper: Object Oriented Programming (CMP: 2123)

Time Allowed: 2:30 Hour

Session: 2013-15

Maximum Marks: 60

Note: Objective part is compulsory. Attempt any four questions from subjective part.

Objective Part

- Q.1.** Write short answer of the following questions each in 2-3 lines. (2*12)
- i. What is a class? Explain with simple example.
 - ii. What is object-oriented programming?
 - iii. What is method overriding?
 - iv. What do you know about lang package in java?
 - v. What is the purpose of packages in java?
 - vi. Write the name of access specifiers in java.
 - vii. What is the difference between interface and abstract class?
 - viii. Why we use final keyword with a class?
 - ix. Give a simple use of ArrayList class.
 - x. What is the purpose of super keyword in java?
 - xi. What is encapsulation in object oriented programming?
 - xii. How we can join two strings in java?

Subjective Part (9 x 4)

- Q.2.** Write a class Time that has three fields hour, minute, second. To initialize these fields it has constructors, getter and setter methods, and a print time method to display time. Also override toString method in this class.
- Q.3.** Write a java program that has two classes Point and Circle. Circle class extends Point class. Demonstrate up-casting by using Circle class?
- Q.4.** Write a java program that has Shape class and subclasses Rectangle, Oval, and Triangle. Use these classes to demonstrate polymorphic behavior.
- Q.5.** What is exception handling in java? Write a java program to handle multiple exceptions?
- Q.6.** Use java text stream classes from java.io package to read and write text into mytext.txt file.
- Q.7.** Use java swing library to create a simple four function arithmetic calculator.