COMSATS University Islamabad, Abbottabad Campus Department of Computer Science

**MID TERM LAB EXAM**

**Object Oriented Programming**

**Class: BSE 3A Total Marks: 20**

**Time: 2 h**

# Question 1

Imagine a publishing company that markets both book and audio-cassette versions of its works. Create a class publication that stores the title and price of a publication. From this class derive two classes:

1. Book, which adds a page count
2. Tape, which adds a playing time in minutes. Each of these three classes should have set() and get() functions and a display() function to display its data. Write a main() program to test the book and tape class by creating instances of them, asking the user to fill in their data and then displaying the data with display().

# Question 2

Write a program in JAVA to show a delegate report regarding the printer usage of CS department. Report consists of total pages has been taken by CS department and total pages taken by each individual faculty member. At the end of each month how many pages in total has been taken from the printer. Suppose faculty strength is 20 in CS department.

A class may contain the following attributes:

**class printer{**

**Private int emp\_id; Private String emp\_name; Private int pages;**

**Static int count;**

**}**

Report should look like as:

**Department of Computer Science**

**Total # of Pages taken:????**

Faculty member 1 has taken:????

Faculty member 2 has taken:???? And so on