

## Quiz 1

### Section: 66\_K

Course code: CSE 221

Course name: Object Oriented Programming

Full marks: 15

Time: 40 minutes

1. Explain the concept of classes and objects in Object-Oriented Programming (OOP). How do they relate to each other, and why are they fundamental to OOP? Provide examples to illustrate your explanation. 4
2. Find out area of rectangle, triangle, and circle (Take values from user) 4
3. Create a class `Product` with the following:

#### Data Members:

- `title` – to store the title of the book
- `author` – to store the author's name
- `copiesAvailable` – to store the number of available copies

#### Methods:

1. `inputDetails()`  
→ Ask the user to enter the book title, author name, and number of available copies using a Scanner.
2. `borrowBook()`  
→ Ask the user how many copies they want to borrow.  
→ Directly reduce the number of available copies (no need to check if enough copies are available).  
→ Show how many copies were borrowed.
3. `displayBookDetails()`  
→ Display the book title, author name, and remaining copies available.

#### Tasks:

1. Create one **Book** object
2. Call `inputDetails()` to input values
3. Call `displayBookDetails()`
4. Call `borrowBook()`
5. Call `displayBookDetails()` again to show updated available copies