

I. Answer the following given the code: (1 pt each)

Consider the class declaration:

```

public class AClass
{
    public void e( )
    {
        .
        .
    }
    public int f( )
    {
        .
        .
    }
    private int a;
    private float b;
}

```

and client code i.e. main() method:

```

AClass c = new AClass( );
AClass d = new AClass( );

```

- 1) Considering *both* pieces of code above, which identifiers are names of class member methods? 1) _____
- 2) Considering *both* pieces of code above, which identifiers are names of instance (class) field data variables? 2) _____
- 3) Considering *both* pieces of code above, which identifiers are names of (class) references to objects? 3) _____

II. Answer the following (3 pts each)

1) A class named Ex1 has a member method r() that has *no* parameter list, returns a **float** value. Write the method specification (header) for this member method.

1) _____

2) A class named Ex2 has a default constructor. Write the method specification (header) for this constructor.

2) _____

OVER

III. Answer the following given the partial class declaration:

```
public class Me
{
    public void r(int x)
    {
        :
        .
    }
    private int g;
}
```

Which line of the following client code causes a compile-time error? (1 pt) IV. _____

```
Me a = new Me( ); // Line 1
a.r(5);           // Line 2
a.g = 10;        // Line 3
```

IV. Answer the following True or False: (1 pt each)

- 1) Classes can have both instance field variables and member methods. 1) _____
- 2) An instance field variable of a class and a member method may be either public or private. 2) _____
- 3) Normally, all the instance field variables of a class are labeled as private. 3) _____
- 4) A class may use another class as the type for an instance field variable. 4) _____
- 5) A class can have multiple constructors but only one default constructor 5) _____
- 6) The name of the class is used as the name of a constructor in that class. 6) _____
- 7) One can access a private instance field of a class from outside the class. 7) _____
- 8) One can access public instance field of a class from outside the class. 8) _____
- 9) A private instance field of a class cannot be used except within the definition of another member function of the same class. 9) _____