Name: **ID:**

Question 1: **[12]**

Define a class and name it as "**Physician**". Add the following inside the class.

1. Define instance variables *name, specialty, rank*
2. Add a parameterized **constructor** which will take 3 parameters. Inside the constructor initializes the attributes with the parameters passed to the constructor.
3. Add the following methods.
    a. *public void meetPatient(String **patient**, String **med**)*
       – Inside the method, print "***name** prescribe **med** to **patient**.*" Also increase the ***rank*** by 1. Here ***name*** and ***rank*** are the instance variables whereas ***patient*** & ***med*** are the value of the parameters passed to the method.
    b. *public String getSpecialty()*
       – the method should return the ***specialty*** attribute.
    c. *public void display()*
       – inside the method, print the value of all three attributes.

Question 2: **[8]**

Define a class and name it as "**Hospital**". Define the **main** method inside the class. Inside the main, do the following.

1. Create an object of **Physician** class ***name**=your name, **specialty**="Child Specialist" and rank =last 2 digits of your id. Store the reference to a variable name **myPhys**.
2. Call the **meetPatient(…)** method using the ***myPhys*** variable and pass ***"Tareq"*** and "***Ace***" as the parameters of the method.
3. Call the **display(…)** method using the ***myPhys***.
    - What is the output of this method?

CT1: CSE 203 - Object-Oriented Programming I: Java
Time: 30 min   Mark: 20

Name: **ID:**

Question 1:   **[12]**

Define a class and name it as "**Player**". Add the following inside the class.

1. Define instance variables **name, teamName, noOfMatchesPlayed**
2. Add a parameterized **constructor** which will take 3 parameters. Inside the constructor initializes the attributes with the parameters passed to the constructor.
3. Add the following methods.
   a. *public void playMatches(int* **count***)*
      – Inside the method, increase the **noOfMatchesPlayed** by **count** where **noOfMatchesPlayed** is the attribute and **count** is the value of the parameter passed to the method.
   b. *public String getTeamName()*
      – the method should return the **teamName** attribute.
   c. *public void display()*
      – inside the method, print the value of all three attributes.

Question 2:   **[8]**

Define a class and name it as "**T20**". Define the **main** method inside the class. Inside the main, do the following.

1. Create an object of **Player** class **name**=your name, **teamName** ="UAPian" and **noOfMatchesPlayed** = last 2 digits of your id. Store the reference to a variable name **player**.
2. Call the **playMatches(…)** method using the **player** variable and pass (last digit of your id + **3)** as the parameter of the method.
3. Call the **display(…)** method using the **player**.
   - What is the output of this method?