



# INSTITUTE OF TECHNOLOGY TRALEE

## Computing Stage II Database Concepts

Continuous Assessment: October 2010

**Duration: 1 Hour**

**Write your answers on a separate sheet. Use Red ink only where appropriate.  
Write your name clearly at the top of each answer sheet.**

Given the following relations:

Doctors(DoctorId, Surname, Forename, Salary)

Patients(PatId, Surname, Forename, Street, Town, County, RegDate, DoctorId, Status)

Appointments(AppId, PatId, DoctorId, AppDate, AppTime)

Where:

A patients status can be either 'P' (current patient), 'D' (deceased) or 'X' (Deregistered)

All dates are in dd/mm/yyyy format

Appointment times are in the format HH:MM (hours and minutes)

**Give the SQL statements to do the following:**

1. List Surname and Forename for all doctors in alphabetical order of surname and then forename. **3 marks**
2. List Surname, Forename and Salary for all doctors in descending order of salary. **3 marks**
3. List all patients who registered with the practice since 1<sup>st</sup> January 2010. **4 marks**
4. List all patients whose Surname begins with the string 'M'. **3 marks**
5. List all **current** patients who live in Tralee. **3 marks**
6. List patient name and doctor name for all current patients.  
Use column aliases to improve output. **6 marks**
7. Find how many patients in total are **deregistered**. **4 marks**
8. Find the number of current, deceased and de-registered patients. **5 marks**
9. Find the total salary bill for all doctors. **4 marks**
10. List all doctors who earn less than the average salary. **5 marks**
11. List Surname, Forename and salary for the lowest paid doctor. **5 marks**
12. Find the lowest, highest and average salary for doctors.  
Use column aliases to improve the output result. **6 marks**
13. List DoctorId and the number of patients registered with each doctor. **6 marks**

14. Add details for doctor John Jones who earns a salary of €130,000 to the Doctors table. Assume that doctor Jones has been assigned DoctorId 8. **6 marks**
15. Add details for doctor Anne Kelly with an undecided salary to the Doctors table. Assume that doctor Kelly has been assigned DoctorId 9. **7 marks**
16. Increase the salary of all doctors by 10%. **6 marks**
17. Delete all deceased patients from the Patients table. **6 marks**
18. List all appointments for DoctorId 3 on 19<sup>th</sup> October 2010. **4 marks**
19. List the appointment time and patient name for all appointments for DoctorId 3 on 19<sup>th</sup> October 2010. **6 marks**
20. List Appointment Time, Doctor name and patient name for all appointments made for 25<sup>th</sup> October 2010. The result should be displayed in order of Doctor surname, forename and appointment time. **8 marks**