SCHOOL OF COMPUTING & INFORMATION TECHNOLOGY

Programming 1 – Individual Project (30%)

BROCKLINE MEDICAL CENTRE EMERGENCY PATIENT MANAGEMENT SYSTEM – UE3

A private health institution, Brockline Medical Centre (BMC), at any given day and time has a long line of patients waiting in its emergency department. The triage nurses manning the department wish to keep better track of those waiting in line and so its head nurse, Angela Dawson, has solicited your assistance with developing an emergency patient management system. The development is to take place on a phased basis with specific requirements for each phase.

Part 3

Given: March 11, 2015
Due: March 25, 2015
Weighting: 10%

Part 1 of the project required you to determine the level of the patients and the severity of their emergency. Part 2 of the project asked you to determine the referral cost. Brockline has made some modifications to the previous requirements and now asks you to write a program that will accomplish the following:

- Process an **unlimited number of patient records, up to a maximum of 50**. A value of -9 for the patient number should signal end of input.
- Accept from the user the patient number, priority level and referral code for the day's visit
- Determine the referral cost based on the priority level and the referral code.

Priority Level	Referral Code	Referral Cost
1	D (Patient referred to Doctor on Duty)	$1500
2	N (Patient referred to Nurses Treatment room)	$700
2	H (Patient referred to Health Centre)	$100
2	R (Patient referred to Regional Hospital)	$4500

- Output for each record the patient number, priority level and referral cost.
- Also output the total in referral costs for each referral code, as well as the total number of patients seen for the day.

Required:

i. The pseudocode which correctly expresses the logic as described above.
ii. A flowchart which accurately represents the pseudocode produced.
iii. A C program which implements the logic in your design.

Mark Scheme

Deliverable	**Marks**	**Notes**
1. Pseudocode (accuracy of logic)	20	
2. Flowchart (accuracy of logic, agreement of flowchart to the pseudocode provided)	25	
3. C program (fully documented – purpose of program, useful comments throughout, useful variable names)	20	
4. Overall Presentation (timely delivery, neatness, readability, ability to explain design if required)	3	
5. Declaration of Authorship Submission	2	
Total	**70**	