

FACULTY OF COMPUTER SYSTEMS & SOFTWARE ENGINEERING

COURSE	:	SOFTWARE TESTING & MAINTENANCE
COURSE CODE	:	BCS3323
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PROGRAMME CODE	:	BCS

Easytravel is a card which is used for paying journeys on buses and undergrounds. The user can store credit to the card at the **Easytravel Loading Machines** and the system automatically deducts the fee of the journey while the user shows the card to the card reader on a bus or at the underground station. The system allows the user to load 10, 20, 50 Euros or any amount to the card. There are four payment methods available: cash, credit card, debit card or pay-by-phone. The system allows the user to get discount 20% of the ticket price if the user is a student. After the transaction, the system allows the user to view or print the balance on a receipt.

i. Design the minimum number of test cases for 100 % 1-wise coverage using the Classification Tree method.

(8 Marks)

ii. Design the minimum number of test cases for 100 % pairwise coverage using the Classification Tree method.

(16 Marks)

iii. Discuss the differences between two the test lists constructed in (i) and (ii) in term of the efficiency of detecting the defects that may occur due to the interface between each pair of the system parameters.

(6 Marks)