Course ECE354
Quiz IIb
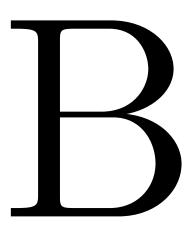
July 20, 2009

1. The computer has three memory frames. The running program requests pages in the following order: 2,3,2,1,5,2,4,5,3,2,5, and 2. Show the allocation of pages to frames after each page using an FIFO policy. *[10p]*

2. What a contraption! Three gnomes shoot signal flares into the air sharing one flare gun. A pizza machine watches for these signals and once it has seen three flares, it makes a pizza. Once it made the pizza, it places the pizza on the plate of a kid that will eat the pizza.

   Available functions include: Gnomes use *PrepareFlare()* to prepare the signal flare and *ShootFlare()* to grab the gun and shoot the prepared flare. The pizza machine uses *MakePizza()* to make a pizza and *PutPizzaOnPlate()* to put the pizza on the kid's plate. The kid uses *EatPizza()* to eat the pizza from the plate. Assume that the usual functions mentioned in the book such as *parbegin(. . .)* are available.

   Hints: Make sure that (a) the gnomes correctly share the signal gun, (b) the pizzamachine doesn't put a new pizza on the kid's plate unless it's empty. There is only one kid which has only one plate.

End of quiz. Total points: 10

B

Quiz guide: The exam consists of 2 questions listed on one page. The exam's total number of points is listed at the end. The quiz duration is 35 minutes. Note make sure you don't have the same quiz ID as any of your neighbours. If you have, say so immediately. **If you don't, you will invalidate your score.**