Three hours

Two academic papers are provided for use with the examination.

UNIVERSITY OF MANCHESTER
SCHOOL OF COMPUTER SCIENCE

Designing for Parallelism and Future Multi-core Computing

Date: Tuesday 21st January 2014
Time: 14:00 - 17:00

Please answer the single Question provided

Two academic papers are attached for use with the examination.
Otherwise this is a CLOSED book examination.
The use of electronic calculators is NOT permitted.
1. Provide an analysis of **one** of the following two papers:
   
   A) Increasing the Effectiveness of Directory Caches by Deactivating Coherence for Private Memory Blocks ISCA 2011
   
   or
   
   B) Performance Evaluation of Intel Transactional Synchronization Extensions for High-Performance Computing SC2013
   
   by answering the following questions:-
   
   a) What is the problem being addressed? (10 marks)
   b) What is the proposed solution? (12 marks)
   c) What are the assumptions? (6 marks)
   d) How is it evaluated? (12 marks)
   e) What are the limitations? (6 marks)
   f) Overall assessment of paper and possible improvements? (4 marks)
   
   (Total 50)