Q1. This question was chosen by 181/215 = 84%, had mean = 63.4% and std dev = 23.7. No systematic errors were evident. The more salient mistakes were a failure to differentiate between functional and non-functional reasons in the proper way. Many students failed to realize that this contrast is drawn between centralized v. distributed systems (not between doing things manually and doing them using a distributed systems). What the course unit means to raise awareness of is that “starting from a centralized system” (real or hypothetical), one could have reasons from replacing it with a distributed system either for functional reasons or non-functional ones, or both. Another issue that many students had was with the role of interoperable standards in helping transparency of access. Such standards are called ‘interoperable’ precisely because they apply to different technical contexts (e.g., different OSs, or different textual encodings, or different serialization techniques, etc.). Finally, several students failed to recall that a batch monitor managed a job queue to cut down on idle times during switch over. Also, several students failed to distinguish first-generation PC OSs, which were single-user and hence not in need of complex functionality, and second-generation ones, where the use of GUIs required the reintroduction of more sophisticated OS functionality.

Q2. This question was chosen by 74/215 = 34%, had mean = 57.1% and std dev = 22.1. The only systematic misunderstanding was about Item 1.a(i), where the majority of students thought of a notice board as a message-oriented middleware (MOM), whereas the best analogy is to think of it as a shared memory. This is because a MOM is a process, whereas a notice board doesn’t have any agency. Some marks were lost but the confusion was on the whole treated leniently and compensated for in Item 1.a(ii). The items on block/non-blocking asynchronous/synchronous behaviour proved difficult, as they always are.

Legend for abbreviations used in the marking

G = generous
VG = very generous
VVG = very very generous
C = compensating for error in prior answer upon which the question depends
NAQ = not answering the question
NCC = no course content
NED = not enough detail
NCE = not convincing enough
NMR = not meeting requirements of the question
NFE = not from evidence given
NRQ = not relevant to the question
NSS = not specific to scenario
RRO = random remarks only.

Q3. Overall the performance is satisfactory. Marks range from under 10 to the full mark 25. The most common error is not answering the question. For example, in part a, you should say clearly whether you agree or disagree with the statement and why, rather than explain the usage of caches, e.g. in DNS hierarchy, which many of you did. Similarly, in part b, you should say whether you agree or disagree with your colleague and why, rather than explain how cookies work.

Part c was answered well overall, part d slightly less so, with the final answer often not given in the right format.