Question 1
The question examines the fundamentals of the course’s curriculum and most students managed to answer it without any major problems, with the exception of part (a). Part (a) is intended to test the student’s thinking and understanding: the students are expected to discuss the pros and cons of “a component as an arbitrary piece of code”, using suitable examples to make their points. Instead, most students say “a component cannot be an arbitrary piece of code” and proceed to define what components are.

Question 2
This question examines the principles of encapsulated components and the details of the X-MAN component model. Most students did not give a good answer. In part (a) most students did not discuss the demerits of X-MAN, such as a bottom-up manner of system construction which many find difficult. In part (b), most students miss the facts that components contribute to behaviour, and that only data channels perform data passing. In part (d) most students miss out key functionalities, such as getting customer orders. They also miss out the top-level loop; misuse Selectors (as guards); miss out interface specifications as well as method signatures; confuse atomic with composite components.

Question 3
This question examines the principles of objects as components and the details of EJBs. Most students answered parts (a,b,c) well, although many students missed out the merit that composition is not an extra activity, and the steps for remote client calls. Most students had problems with part (d), similar to those for part (d) in Q2, e.g. missing key functionalities and method signatures, incorrect system construction, etc.

Question 4
This question examines the principles of architectural units as components and the details of UML2.0. Most students answered parts (a,b,c) of this question well. Some students did not mention the merit of simplicity and modularity. Most students had problems with part (d), similar to those for part (d) in Q2 and Q3, e.g. missing key functionalities and service signatures, incorrect system construction, etc.