Please see the attached report.
The fact that majority of students chose not to attend lectures was very evident in answers given in the examination.

Question 1
a) Generally the answers to this were reasonable. The one point where several students lost some marks were they just indicated that developer time was expensive without giving a description of what the developer was doing with their time.

b) The big thing that many students failed to mention was that a code change is required in order to fix a bug. A number of answers described one of the identified factors requiring code change as a perfective change; none of these factors would require a perfective change.

c) The main problem with answers was that they did not take into account the scenario described. This is a small firm with software created by a single developer, requirements and design documentation is likely to be on a par with that created during a third year project, i.e. also most non-existent. So, identifying this as a main source is incorrect. Also the developer has gone, trying to get information from them is likely to be impossible. Some answers suggested using the source code despite the fact that this was excluded by the question.

d) Generally this part was answered well. The main problem was with answers that did not expand the for loop statements into the three implicit nodes associated with these statements.

e) This part was looking for answers that showed awareness of the deployment of real software and the consequences of problems. Many answers failed to demonstrate important issues like the direct cost of software failed and the indirect cost in the lost of reputation.

Question 2
a) Generally well answered.

b) Some answers lacked clarity in describing why idioms and patterns are useful.

c) The example code had two nested for all loops, many answers failed to identify this. The question explicitly asked for identification of what was being achieved by the identified idioms, a significant number of answers failed to cover this part of the question.

d) The part was divided into two elements one identifying general language elements and the other identifying domain related elements. Many answers just gave language elements. The question also asked for reasons why the identified things were important; this part was either absent from answers or poorly done.

Question 3
a) Question was looking for assessment of options and justification for a recommendation. The quality of answers varied. Answers that lacked something, for example, failed to appreciate the long-term cost of an option. A significant number of answers failed to give a recommendation or a justification for a recommendation.

b) A number of answers just migrated data from the dress shop system to the on-line retailer system. Before this can happen, the existing on-line retailer system must be updated to allow this data to be migrated.

c) Again the main problem encountered in answers was not altering the on-line retailer system to include the bespoke operations of the dress shop. There was also a lack of justification for the proposed architecture.

d) Many answers failed to clearly indicate the order in which elements in the architecture would be migrated or failed to appreciate business value in the proposed order.
Question 4
a) This question was not attempted by many students. Those that did generally gave reasonable answers.

b) This part of the question was about defining the criteria that would be used to assess options, not actually assessing the options. Some answers showed a lack of understanding about what the question was asking.

c) Answers were generally good. However, some lacked some depth to their consideration. A number of recommendations failed to appreciate the absolute need for the business to have a system that was guaranteed to work from day one.