Please see the attached report.
General Remarks

There were 20 students who sat the exam. The median mark was 29 out of 52, with the mean mark 29. There were 4 students with a mark below 50%. Some of these students may be able to pass the unit with suitable coursework marks. There was 1 student who achieved a mark above 70% in the exam.

Overall, performance on the MCQs and true/false questions was better than in the essay style questions (25–29).

Item analysis

As the item analysis (run on all questions) shows, the exam had 7 easy, 21 medium and 1 hard questions, which we consider to be a good mix. It also had 1 question whose discrimination could not be calculated, and 5 questions with poor discrimination; these have all been reviewed: the first one was a question which was very easy (all students answered it correctly); the six questions were all considered acceptable (they were mostly relatively easy).

Among the most difficult multiple choice questions were questions that asked

- to identify which of the given OWL class expressions was equivalent to a relatively easy, given one.
to determine whether a given, simple ontology entails a given, simple axiom.

about OWL annotation properties: again, this question can be answered correctly by anybody who has a basic understanding of OWL, so the poor performance came as a surprise.

Each of these questions can be answered correctly by anybody who has a basic understanding of OWL and its semantics, and so the poor performance on these questions was a surprise—in particular, because all but one student following this course unit had previously followed a course unit on logic and automated reasoning.

**Question 25**

Average score: 0.83 (out of 5)

Overall, this question was not answered well. The ontology needs to be parsed, and the data structure inspected. Reasoning does **not** play a part here—we are primarily concerned with the assertions in the ontology.

Many answers consisted of incoherent, irrelevant statements. Too many answers failed to even consider or address the question that was asked—that of building an application. Details of the OWL API were not considered sufficiently. The need for reasoning was stated incorrectly in many answers.

**Question 26**

Average score: 1.86 (out of 4)

Answers to this question were reasonable. Ideally answers would have touched on the need for partonomic relations and some taxonomy, plus a GCI that established the fact that a bicycle with a party that was fault was also faulty.

Many answers didn’t actually address the notion of a Faulty Bicycle however, but just provided some kind of partonomic model of bicycle parts. The partonomies were, in the main, acceptable.
Question 27

Average score: 1.08 (out of 3)

Many students had difficulties answering this rather straightforward question: it involved recognising that the statement corresponds to a “SubClassOf” axiom whose right hand side involves both a “some” and an “only” restriction, and many students struggled to recognise these three points, and to realise them correctly.

Question 28

Average score: 3.13 (out of 5)

Most students performed reasonably on this question, but only few realised that there were three central, independent dimensions involved: clothing, fabric, and fibres: many students conflated these three into just two, which doesn’t reflect the scenario well at all.

Question 29

Average score: 2.23 (out of 5)

The performance on this question was (expectedly) mixed: this was a question targeted at the high performing end of the class, and required both good understanding of the material (to describe what post-coordination is) and the ability to think of a suitable example.