

Overall, the exam results under the multiple-choice tests method, according to our assessment, are fairly reliable and able to bring back a good analysis. Feedback from students is also positive, though most of the students know that multiple-choice tests require a broader knowledge than writing tests do. Furthermore, the usage of forbidden references in exams can be significantly reduced.

3. Conclusion

1. The progress of building the databases for objective multiple-choice tests of Thermal Engineering module is shown at various cognitive scales.

2. The database is built up in a dynamic form, helping to mitigate the factors enabling students to memorize answers.

3. Exam papers have been designed in such a way that facilitates exam taking and marking.

4. Successful testings in the exams in the form of

objective multiple-choice tests are recorded.

5. The database can be used to apply in mass-testing in the future.

REFERENCES

- [1] Phan Tu Huong, Excel VBA (Visual Basic For Application) Programming, Statistics Publisher, Hanoi (2010)
- [2] Tran Quoc Chien, Designing and constructing software for objective testing, Science research projects B97-16-0, University of Education – The University of Danang (1999).
- [3] Pham Le Dan, Dang Quoc Phu, Exercises of Thermal Engineering module, Education Publisher, Hanoi (2009).
- [4] Bui Hai, Exercises of Thermal Engineering module, *Science and Technical publisher*, Hanoi (2009).
- [5] Ha Manh Thu, *Objective tests on* Thermal Engineering module, Publisher Polytechnic, Hanoi (2008).
- [6] *Academic Calendar 2012-2013*, University of Science and Technology – The University of Danang (2012).

(The Board of Editors received the paper on 26/10/2014, its review was completed on 29/10/2014)