

Exam History of Science

Date: monday July 7, 2014

Examiner: dr. D.J. Beckers

Time: 15:15 – 17:15u

Course code: FEW X 400318

General:

- (1) State your name and student number clearly on the top of every page.
- (2) State your answers completely and in correct English, don't use loose phrases. Unclear language or illegible handwriting will be disadvantageous to your result.
- (3) This exam consists of twelve (12) questions. You answer eight (8) questions. You decide which questions you want to answer.
- (4) Make sure that it is clear which question your answer belongs to, by mentioning the question number in the margin.

1. Algol

The history of Algol illustrates how different sides of the Atlantic came to different solutions to the same problem. Discuss this statement.

2. Internet

Explain in what ways the 1990s Internet differed from preceding networks, both in its technical layout as in its implications for society.

3. Computing and military funding

Discuss in what ways military funding has influenced the history of computing.

- (a) From the perspective of Ceruzzi.
- (b) From the perspective of Agar.

4. Digital culture

Doueiri describes the rise of digital culture as a new “civilising process”. Describe in what way(s).

5. Digital divide

According to Doueiri the world, since the 1990s is facing a growing “digital divide”.

- (a) What, according to Doueiri, constitutes this digital divide?
- (b) Explain the role of Digital Rights Management in the digital divide.

6. IBM

In the history of computer science, the computer manufacturer of the fifties and sixties was, without doubt, the American office machine factory *International Business Machines* (IBM).

(a) Discuss in what way IBM was “ahead” of other computer firms in the 1950s.

(b) How did IBM lose its leading position?

7. SAPO

Explain how the history of the SAPO project illustrates the politicization of the Eastern European computing industry.

8. Computer hobbyists

Discuss the role of hobbyists in the rise of the personal computer.

9. Government machine

According to Agar the rise of computer technology was a consequence of government bureaucracy thinking. Explain his point of view.

10. Histories of computing

In his paper “Histories of computing”, the historian Michael Mahoney explains that there exist several historical points of view that can be used to describe the history of computing. Explain which histories he means and discuss shortly why these perspectives lead to different stories.

11. Defining “computer”

In his book, *A history of modern computing*, Paul Ceruzzi starts with an introduction explaining that in the 1980s it was not at all obvious to write on the history of computing: the history of washing machines would have been equally interesting. He uses this to explain what is actually the difference between computers and other machines. How does he define the computer? And what role does the washing machine play in that definition?

12. Unix

In literature (by Paul Ceruzzi and others) one may find references to “the ironies of Unix”. What is intended? Explain your answer.