

# UNIVERSITEIT TWENTE.

Exam: Computer Ethics (course code: 191612680)  
Time and place: June 29, 2011, 08.45-12.30, Sportcentrum  
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There are in total 22 multiple-choice questions. For each question, you must choose **one** correct answer out of the four alternatives and fill in the multiple-choice form accordingly. For some questions, there are two terms missing (indicated by a blank line), and you choose the alternative that has the correct terms *in the correct order*. The exam questions are given only in English, but do not hesitate to ask if you have any questions about Dutch translation.

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1. According to Jim Moor (as described in Bynum), why are there so many new ethical problems related to computer technology, compared to other kinds of technology?
  - a. because computers are logically malleable
  - b. because computer technology has developed so rapidly
  - c. because computers eventually brought about the Internet
  - d. because computers can make life-and-death decisions
  
2. Rule utilitarianism is similar to Kant's deontological ethics in only one of these ways. Which one?
  - a. Both theories require you to look at what the consequences would be if everybody were allowed to do the same
  - b. Both theories first define what is 'good' and, on the basis of that, what is 'right'
  - c. Both theories disallow treating other humans as mere means for an end
  - d. Both theories are normative
  
3. What is the fallacy of 'begging the question'
  - a. An argument where there are more premises than needed
  - b. An argument where the premises presuppose the truth of the conclusion
  - c. An argument where you infer the conclusion based on denying the antecedent
  - d. An argument that has a question rather than proposition as one of the premises
  
4. Why does Michael Davis criticize the standard theory of whistle-blowing
  - a. It is inconsistent with what we know about whistle blowers
  - b. It is inconsistent with utilitarianism
  - c. It is inconsistent with the Software Engineering Code of Ethics and Professional Practice
  - d. It is inconsistent with Kant's categorical imperative

5. Gotterbarn (as described in Coleman) argues that the problem of many hands is partly a result of
  - a. our inability to consider the consequences of our actions if everybody would do the same
  - b. the way in which bit torrent technology can be used to disseminate software
  - c. the architecture (protocols etc) of the Internet and its embedded values
  - d. a model of responsibility which looks to assign responsibility to one person
  
6. What does the acronym 2P2Q refer to?
  - a. Pain, Pleasure, Quantity and Quality
  - b. Parallell Processing and Quantum Qomputing
  - c. Processing, Pace, Quality and Quantity
  - d. the fact that processing power and storage quantity is doubled every year (aka Moore's law)
  
7. Why does Benjamin criticize systems that modify the interface based on decisions made *for* the user?
  - a. because it leads to privacy concerns
  - b. because it makes the user feel out of control
  - c. because it presupposes that designers are able to predict what users want
  - d. because it does not allow users to reflect on their ability to cause harm
  
8. Introna defends the need for privacy in the information society for four different reasons, three of which are listed below. Which one of these is not featured in Introna's discussion.
  - a. privacy as important for social roles
  - b. privacy as important for market economy
  - c. privacy as important for autonomy
  - d. privacy as important for intimate relationships
  
9. Jim Moor argues that a typical problem in computer ethics arises because computer systems tend to create both \_\_\_\_\_ and \_\_\_\_\_.
  - a. societal responsibilities; professional responsibilities
  - b. increased power; increased vulnerability
  - c. policy vacuums; conceptual vacuums
  - d. embedded values; dis-embedded values
  
10. Tavani argues that data-mining techniques, by their very nature, cannot comply with two of the eight privacy principles advanced by OECD, because these two principles have to do with \_\_\_\_\_ and \_\_\_\_\_ of information.
  - a. retrieval; processing
  - b. specifying the purpose; limiting the use
  - c. releasing; withholding
  - d. the intrinsic value; the instrumental value

11. According to Brey, the embedded values approach holds that computer systems are not morally neutral. What does he mean by this?
- There cannot be an ethics of computer systems separate from the ethics of *using* computer systems
  - Computer systems can neither support nor go against the realization of values such as privacy and freedom of information.
  - Computer systems engage in moral actions that are morally praiseworthy or blameworthy
  - Computer systems have built-in tendencies to promote or demote moral values and norms
12. Sicart argues that *Call of Duty 4* is a reflection about agency in modern warfare because
- it is telling a moral story about warfare
  - it forces players to ethically reflect about their role in the simulation
  - the moral story includes real-world events
  - it portrays more realistic violence than most other games
13. According to Floridi, informational privacy is a function of
- processing power and storage quantity
  - the ontological friction in the infosphere
  - the expectations we have about our level of privacy in a given situation
  - the number of distinct databases in which our personal information is stored
14. What is the "end-to-end" (e2e) principle?
- In communication systems, complex processing should be done at the ends and the network itself should be as simple as possible
  - When engaging in online dialogue, we should take into account the cultural background of the communication partner
  - When designing a product, the final product should match the initial design specifications
  - Embedded values can both promote and demote moral values, depending on the purpose of the computer system
15. Why do Thaler and Sunstein label their paternalism as 'libertarian'
- because it is based on John Stuart Mill's political philosophy
  - because it presupposes that humans are usually rational and make informed choices
  - because it does not forbid any options
  - because 'libertarian paternalism' is a contradiction in terms, just like the idea of neutral technology
16. Why, according to Coleman, is it important to have a clear understanding of programming standards
- because programming standards are ultimately more important than moral concerns
  - because programming standards are in themselves a form of 'nudge'
  - because it allows us to determine when technologies are value-neutral
  - because it makes us better able to understand when errors are the result of programmer negligence

17. Thomas Hobbes argues that there are two fundamental facts about human beings, which constitutes the foundation of his ethical theory
- human nature is by necessity *rational* and *social*
  - we are all selfish and can only survive by cooperating with each other
  - humans are incapable both of predicting consequences and of letting will-power guide their actions
  - humans are inherently spiritual beings, and humans can only be motivated by supernatural threats and promises
18. According to Bynum, Deborah Johnson holds the view that questions in computer ethics are...
- radically new because computer technology is radically different from other technologies
  - unimportant, because computer systems do not force people to act morally wrong
  - not radically new, because they are merely variations of old moral issues
  - important, because computer systems can force people to act morally wrong
19. Lessig distinguishes between three layers of communication systems such as the Internet: the physical layer, the logical layer, and the content layer. When it comes to ownership of these layers, ...
- only the physical layer can be someone's property, the others cannot
  - only the semantic layer can be someone's property, the others cannot
  - only the logical layer can be someone's property, the others cannot
  - all the layers can be someone's property
20. In 1995, Krystyna Górniak-Kocikowska predicted that...
- a new type of global ethical theory would have to emerge from the computer revolution
  - a "technological singularity" would occur in 50 years, beyond which the fate of humanity is uncertain
  - someone would die as a result of cyber-stalking within 5 years
  - intellectual property would become impossible to protect with the advent of the Internet
21. How, according to Benjamin, can we measure a computer program's ability to induce a state of flow?
- by measuring the user's skin temperature
  - by examining the user's state of subjective well-being before and after completing a task
  - by comparing the user's estimate of task duration to actual task duration
  - by measuring the amount of ontological friction between the program and user
22. When using the value-sensitive design approach, according to Friedman et al, we should start our analysis with...
- a moral value (e.g. justice)
  - a concrete technology (e.g. surveillance cameras)
  - a particular context of use (e.g. urban planning)
  - any of the above