Name: _____ ITU ID: _____ Signature: _____

İSTANBUL TECHNICAL UNIVERSITY
Department of Computer Engineering
BLG412E – Computer Ethics – Summer 2014
Exam Question Sheet

Duration: 60 minutes.

Rules: - Not open-book. No extra notes or papers are allowed.
- Cellphones must be put away. Calculators not allowed.
- Answer in English.
- Write in the delineated area (text outside the area will not be marked).
- Put your name and ID on all pages.

BLG412E EXAM

Thesaurus

bill – invoice, charge   **state** – say, claim, declare
justify – defend, explain   **provide** – give, present
apply – pertain, be relevant   **concrete** – specific, real-world
roll out – publish, deliver   **in favour of** – beneficial to, preferentially treating

Question 1 (30 pts): The ACM/IEEE-CS Software Engineering Code of Ethics and Professional Practice (SECEPP) is a code of ethics developed specifically for computer professionals. For each of 3 different *principles* mentioned in the code, briefly give the *short version* (1 sentence), and provide one *clause* (example or suggested behaviour) from the *long version* (1 sentence). For each clause given state whether the clause can only apply to computer professionals or whether it can be easily extended to other professions (1 sentence). Either give reasoning or a concrete example to support your conclusion (1-2 sentences).

Question 2 (30 pts): You are a junior developer for company A developing B2B (business to business) billing software for company B who wish to bill company C. During the rush to roll out the product, you realise that the calculation of the bill has an error that will almost always calculate a bill in favour of company B. As the error is in favour of company B (company A's client) and as there is an impending roll-out, you are instructed by your immediate supervisor in company A to ignore the bug unless it is specifically raised by company B. You raise your concerns with your CEO who says he will review the problem in the future but he does not make any commitment to acting.

What action should you take now? Describe :
- 2 different principles discussed in the literature that you can apply to this question.
- For each principle, one concrete action that it might entail.
- For each principle, one downside.

Question 3 (40 pts): For each of the following items, state whether it:
- Should be treated as intellectual property.
- Can be patented.
- Can be copyrighted.
- Can be treated as a trade secret.

Justify each conclusion based on either legal or ethical principles (stating the principle), as relevant (1 sentence for each conclusion). e.g. "images can be copyrighted because they are expressions that are fixed in medium".

- Item: Algorithms.

- Item: Source code.

- Item: Machine code.

- Item: GUIs.

- Item: Databases of user information.