SE 101: Introduction to the Methods of Software Engineering

In-Lab Quiz #3

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20 min.

The only aid allowed is an electronic calculator in which notes cannot be stored. No texts or notes are permitted.

1. For each of the items on the left, identify on the right the most appropriate type of intellectual property it would be classified under, and enter in the box the letter labelling that IP type.

"Intellectual Property"	**IP Type**
[C] The name "zoom groom" for a cat brush	A. Patent
[D] The appearance of Microsoft's Window's desktop	B. Copyright
[C] The UW Software Engineering logo	C. Trademark
[E] The ingredients and recipe for making McDonald's french fries	D. Industrial Design
[F] A white-pages telephone book	E. Trade Secret
[B] A history textbook book	F. Not Intellectual Property

2. In Ontario, the professional practice examination required before licensure contains questions on

   (a) Ethics, professional practice, law, and liability

   (b) Ethics, law, safety, and risk management

   (c) Ethics, the impact of technology on society, and law

   (d) Ethics, law, liability, and engineering economics

3. Which of the following contribute to the definition of the practice of professional engineering, as defined in the Ontario Professional Engineers Act (circle all that apply)

   (a) an act of designing, composing, or evaluating

   (b) an act of directing or supervising

   (c) an act of advising,

   (d) a project that can affect human life, health, property, or public welfare

   (e) a project that involves coordinating a large and varied group of experts

   (f) a project that requires the application of engineering principles

4. In order to be patentable, an invention must (circle all that are appropriate)
   (a) be useful
   (b) be novel or new
   (c) not be an obvious improvement over something that exists
   (d) be intended for legal purposes
   (e) fall within the statutory classes of things and processes that can be protected by patent.

5. Caution should be taken when using checklists as a risk management tool because
   (a) They are the result of "generic brainstorming" and thus may not apply directly to the situation at hand.
   (b) Hazards not specifically mentioned in the checklists may be overlooked and what is considered a hazard may change with new knowledge.
   (c) The technique is inductive and the analysis is carried out by completing a specifically designed table following certain rules.
   (d) They are not a "complete" technique, in that they can aid in identifying hazards, but cannot aid in deciding how to reduce risk.

6. Fault tree analysis (FTA) is good for
   (a) Identifying hazards
   (b) Identifying the causes of hazards - information that the engineer can use to decide how to reduce or eliminate hazards
   (c) Identifying the effects of hazards - information that the engineer can use to decide which hazards are more important to reduce or eliminate

7. In order to satisfy the academic requirements for becoming a licensed P.Eng., one has to either graduate from a CEAB-accredited engineering program, pass a set of confirmatory examinations, or pass a set of fundamental engineering examinations and a set of discipline-specific technical examinations.

   Which of the following actions will improve the clarity and grammatical correctness of the preceding sentence?
   (a) Replace "In order to" with "To"
   (b) Remove "either"
   (c) Add "to" before each instance of the word "pass"
   (d) (a) and (b)
   (e) (a) and (c)

8. Which of the following is an ill-phrased sentence?
   (a) Although the mayor assured the parents that their kids were perfectly safe walking to school, many were uneasy.
   (b) The parents on Young St. tried to ensure their kids' safety by arranging for one of the parents to walk the kids to and from school every day.
   (c) The kids couldn't decide if walking with a parent affected their safety.
   (d) One effect of the students being walked to school by a parent was that none of the students were ever late for school.
9. Which of the following is an ill-phrased sentence?
   (a) The boy that wore the flashy sneakers tripped on his shoe laces.
   (b) John's car, which is gray, is invisible in the rain.
   (c) Everyone who paid his or her fees before the deadline received a 10% rebate.
   (d) The programming team that practiced the most won the contest.
   (e) Liz bites her nails, which is a bad habit.
10. Which of the following is an ill-phrased sentence?
   (a) Risk management comprises hazard analysis, risk evaluation, and management decisions.
   (b) Little girls are composed of sugar, spice and everything nice.
   (c) No one in the family, which comprises three generations, goes to bed early.
   (d) Strength, endurance, flexibility, and balance comprise physical fitness.
11. Identify the ill-phrased sentences (circle all that are appropriate)
   (a) In order to qualify for the play-offs, a team must have a winning record.
   (b) Tammy went swimming, despite the fact that the water was cold.
   (c) The games will be played, whether it rains or not.
   (d) The reason the team stayed up all night was that it wanted to finish its project.
   (e) Susan could not sing on-key, nor could she keep a beat.
12. Which of the following is an ill-phrased sentence?
   (a) The office parties helped to effect good relations among the co-workers.
   (b) The cold temperature of the room affected Reem's ability to write.
   (c) The players' affects became more positive as the team scorec more points.
   (d) Dottie's niece affects brightly coloured clothes.
   (e) Lack of sleep can adversely effect my memory.

13. Which of the following is an well-phrased sentence?

    (a) After examining the students' marks, the teacher deduced that girls have better math skills than boys.

    (b) After watching the students at recess, the teacher concluded that girls are different from boys.

    (c) Upon examining the students' marks, the teacher decided the students needed to improve their grammar.

    (d) After examining the students' marks, the teacher noticed that half the class excelled at math, while the other half excelled at English.

Extra credit
What is the official legal name of the organization/agency/institution that defines the regulations governing the engineering profession in Ontario?

The Association of Professional Engineers of Ontario