Assignment 12

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

1. Consider the following transition system.

   ![Diagram of transition system]

   Does the above transition system satisfy $F(p_1 \land p_2)$?
   - Yes
   - No

   No, the answer is incorrect. Score: 0

   Accepted Answers:

   2. Does the transition system of Question 1 satisfy $p_1 \lnot C p_2$?
   - Yes
   - No

   No, the answer is incorrect. Score: 0

   Accepted Answers:

   3. Does the transition system of Question 1 satisfy the LTL formula $F(p_2)$?
   - Yes
   - No

   No, the answer is incorrect. Score: 0

   Accepted Answers:

   4. Does the transition system of Question 1 satisfy the CTL formula $EF(p_1 \land p_2)$?
   - Yes
   - No

   No, the answer is incorrect. Score: 0

   Accepted Answers:

   5. Does the transition system of Question 1 satisfy the CTL formula $AX \neg AG(p_1 \land p_2)$?
   - Yes
   - No

   No, the answer is incorrect. Score: 0

   Accepted Answers:

   6. The LTL property $G(p_1 \land G \neg p_2)$
   - is invariant property
   - is safety property
   - is fairness property

   No, the answer is incorrect. Score: 0

   Accepted Answers:

   7. The LTL property $GF(p_1 \land G \neg p_2)$ is
   - is invariant property
   - is safety property
   - is fairness property

   No, the answer is incorrect. Score: 0

   Accepted Answers:

   8. Every non-deterministic B"uchi automaton can be converted to an equivalent deterministic B"uchi automaton.
   - True
   - False

   No, the answer is incorrect. Score: 0

   Accepted Answers:

   9. Every LTL formula $\phi$ can be converted to an equivalent CTL formula $\mu$. By equivalent, we mean that a transition system satisfies $\phi$ if and only if it satisfies $\mu$.
   - True
   - False

   No, the answer is incorrect. Score: 0

   Accepted Answers:

   10. The main goal of this course was to study
   - a technology to develop faster search engines
   - a method to automatically learn models of control software
   - a method to formally verify models of control software with respect to formally written specifications
   - program compliance

   No, the answer is incorrect. Score: 0

   Accepted Answers:

   11. The main goal of this course was to study
   - a technology to develop faster search engines
   - a method to automatically learn models of control software
   - a method to formally verify models of control software with respect to formally written specifications
   - program compliance

   No, the answer is incorrect. Score: 0

   Accepted Answers: