CS 234 midterm exam question types

Here are two examples of the types of questions you might see on the exam. Sample subquestions and solutions have been provided as illustrations of how to interpret the instructions; they are not intended to be indicative of actual subquestions that might be asked.

1. For each subquestion below, determine whether the statement is true for everything that fits the description, false for everything that fits the description, or true for some and false for others. Then, fill in each of the boxes either with an example that fits the description or a justification, as follows: in the box marked True, provide an example for which the statement is true or a justification of why no such example exists; in the box marked False, provide an example for which the statement is false or a justification of why no such example exists.

   (a) Description: An animal; Statement: It can fly.

      ____  ____
      |True| False |
      |

      You could give an example of “bird” for True and “cat” for False.

   (b) Description: Something that can talk; Statement: It is a rock.

      ____  ____
      |True| False |
      |

      You could explain that no rocks can talk for True and give an example of “Naomi” for False.

2. For each of the following questions, mark the appropriate box with the correct answer to the question “Given X, can we determine Y?” and provide an explanation. If you mark Yes, give a brief explanation. If you mark No, give an example of X such that there are two possible values of Y.

   (a) X is a section of CS 234 in Fall 2019; Y is the room in which it is being held.

      Yes □
      No □

      Explanation:
      You would mark Yes and explain that both sections are held in the same room.
(b) $X$ is a course held in Fall 2019; $Y$ is the room in which it is held.

Yes □
No □

Explanation:

*You could choose any course for which different sections are held in different rooms and specify what the course and rooms are.*