Quiz 1

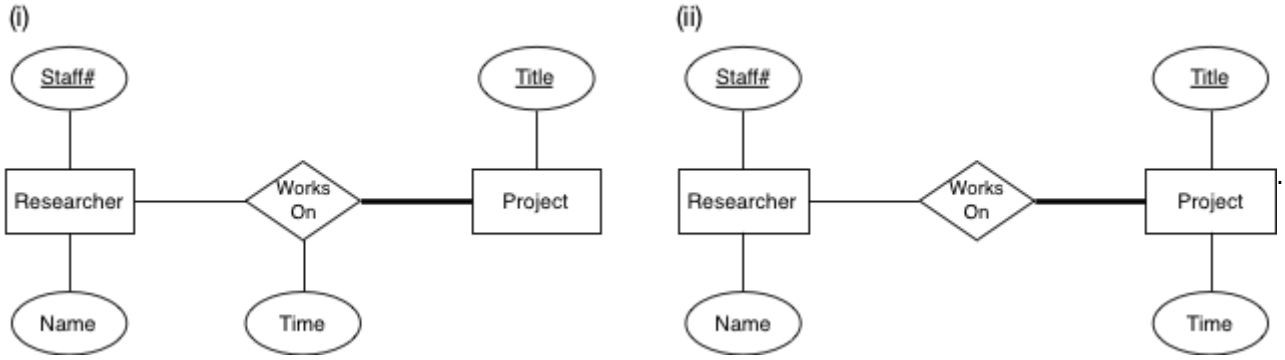
Answer the following questions about Entity-Relationship (ER) diagrams.

Note that thick lines indicate total participation and arrows indicate the 1 end of a 1:n relationship.

Deadline	Friday, 27 September 2019 at 11:59PM
Latest Submission	Monday, 23 September 2019 at 7:24PM
Raw Mark	4.00/4.00 (100.00%)
Late Penalty	N/A
Final Mark	4.00/4.00 (100.00%)

Question 1 (1 mark)

Which of the following best describes the difference in the meaning of the following two ER diagrams



(a) ○	In (i), every researcher must work on a project and we know exactly how much time each spends on that project. In (ii) every researcher works on a project, but we only know the total time for the project.
(b) ◉	In (i) every project must have some researchers and we know exactly how much time each researcher spends on each project they work on. In (ii) every project has some researchers working on it, but we only know the total time for the project.
(c) ○	In (i) every researcher works on one project and we know exactly how much time each researcher spends on the project they work on. In (ii) every researcher works on at least one project, and we know the total time they spend working on all of their projects.
(d) ○	In (i) every project must have some researchers and we know exactly how much time each researcher spends on each project they work on. In (ii) every project has some researchers working on it, and we know the total time each researcher spends working on all of their projects.
(e) ○	None of the above answers is correct.

✔ Your response was correct.
Mark: 1.00

Question 2 (1 mark)

Which of the statements below best captures the semantics of this ER diagram:

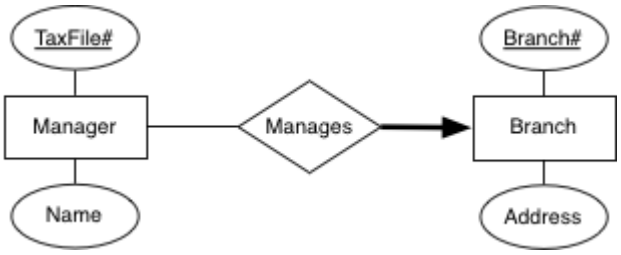
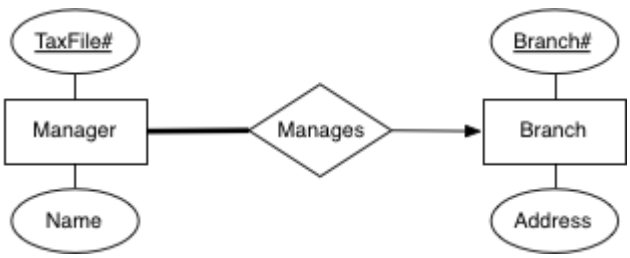
(a) ○	Every Flurf owns one Boggle; every Boggle is owned by a Flurf.
(b) ○	Every Flurf owns one or more Boggles; every Boggle is owned by a Flurf.
(c) ◉	Some Flurfs own one Boggle; every Boggle is owned by one or more Flurfs.
(d) ○	Some Flurfs own one or more Boggles; every Boggle is owned by one Flurf.
(e) ○	Some Flurfs own one Boggle; some Boggles are owned by a Flurf.
(f) ○	None of the above answers is correct.

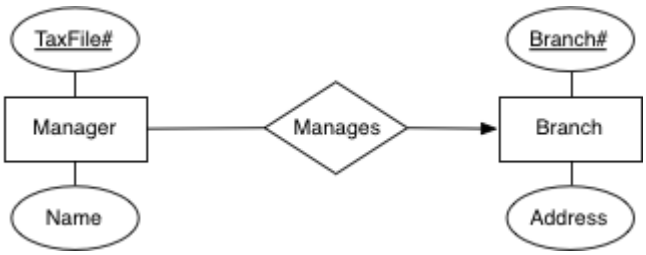
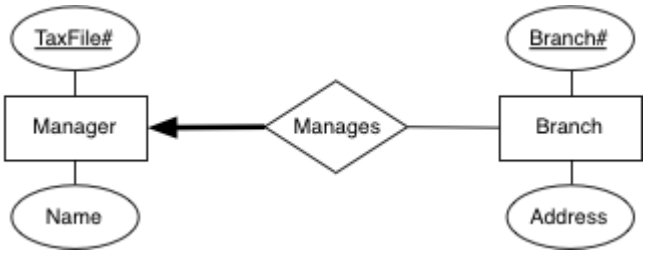
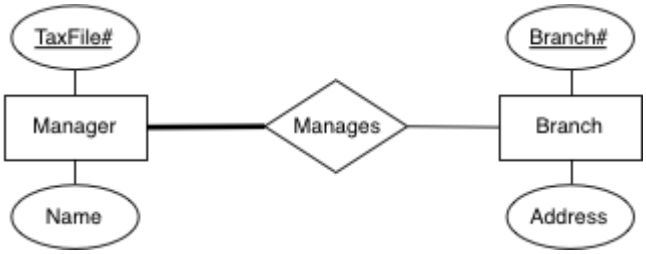
✔ Your response was correct.
Mark: 1.00

Question 3 (1 mark)

Which of the ER diagrams below most accurately implements the following banking scenario:

- every manager is associated with one bank branch (the one they manage)
- not all branches have a manager, but some may have more than one manager

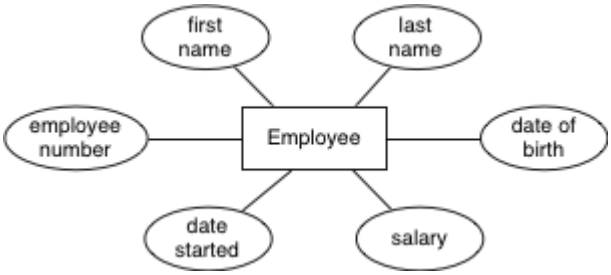
(a) ○	
(b) ◉	

(c)	
(d)	
(e)	
(f)	None of the above is correct

✔ Your response was correct.
Mark: 1.00

Question 4 (1 mark)

Which of the following attributes or attribute combinations is most likely to be a candidate key?



(a)	first-name + last-name + date-of-birth
(b)	first-name + date-started
(c)	employee-number
(d)	last-name + employee-number
(e)	date-started

(f)	None of the above is a candidate key

✔ Your response was correct.
Mark: 1.00