Answers to exercise 10 on p. 313 of the handout.

a. Yes.

b. [tʃ] occurs before a high front vowel; [ts] occurs before a high back vowel; [t] occurs elsewhere (in the environment of mid and low vowels, front and back).

c. The phoneme is /t/ because it occurs “elsewhere,” i.e., in the most varied environments; while both [tʃ] and [ts] are found in narrowly defined environments.

d. /tatami/ /tukue/ /tutumu/
/tomodati/ /tetudau/ /tizu/
/uti/ /ʃita/ /kata/

Some comments:

1) Question (b) should have been asked before (a), since the answer to (b) provides the basis for determining the answer to (a).

2) The “elsewhere” distribution of the phoneme is much easier to see here than in most problems of this type. If you have difficulty determining which sound is the phoneme, try writing rules for each sound; the rule for the non-phonemic allophone will be the one which is simpler to write.

3) What would be the rule for [tʃ]? For [ts]?