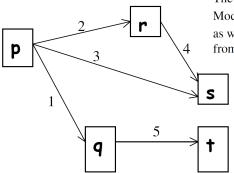
Name: \_\_\_\_\_\_ ID: \_\_\_\_

Time: 15 minutes

## Problem 1

Given a set of functions that print or store student status reports, with data-flow connections as shown in the diagram and table below (arrow direction is In flow, and Out flow is counter-arrow), determine the coupling type(s) between the functions.

Table 1: Function call and return data Call # InOut 1 Student Object StudentValid Flag 2 Switch Flag 3 Student ID 4 StudentReport Object \_ 5 Student ID Student Credit



The file "**F**. **TMP**" is used by modules **p**, **s**, and **t**. Modules **p** and **t** both write Student data to the file as well as read from it, while module **s** only reads from the file.

Determine the coupling types in the table  $(CP1 \rightarrow CP10)$ :

Table 2: Coupling Types

	p	q	r	s	t
p		CP1	CP2	CP3	CP4
$\mathbf{q}$			CP5	CP6	CP7
$\mathbf{r}$				CP8	CP9
$\mathbf{s}$					CP10
$\mathbf{t}$					