

Results of POCAT, Winter '06

The Program Outcomes Achievement Test (POCAT) is a direct assessment tool for assessing the degree of achievement of the various outcomes of the BS-CSE program. For complete details, please see:

<http://www.cse.ohio-state.edu/~neelam/abet/DIRASSMNT/firstGroup.html>

Twenty three students took the test in the Winter '06 quarter. The results appear in the table below, one row per student. The first column in the table is a code assigned to the student. The remaining 19 columns list the answers provided by the particular student for each of the 19 questions in the test. Following the rows corresponding to the individual students, is a "key" row listing the correct answers. The next row lists, for each question, the number of students who gave the correct answer. The first row lists the question numbers, and the last row lists the number of the course most directly related to the question.

Note: Only the individual students know their respective codes. There is no way for anyone else to find out how any individual student performed on the test.

| Code | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|----------------|-----|-----|-----|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| A | d | c | b | d | c | c | c | a | a | e | c | a | a | c | b | e | d | c | c |
| B | b | a | c | d | b | c | c | c | a | c | f | a | a | c | c | e | b | b | c |
| C | b | c | c | d | a | b | c | b | d | a | d | c | c | c | c | e | b | c | c |
| D | a | a | c | d | d | e | c | b | a | c | f | b | d | b | a | e | b | c | c |
| E | d | a | c | d | d | c | c | b | a | c | b | b | e | c | a | e | d | b | c |
| F | b | a | c | d | d | a | c | b | a | c | e | b | d | b | b | e | b | c | c |
| G | d | a | b | d | d | e | c | d | a | d | g | a | e | d | a | e | b | c | c |
| H | b | d | c | d | a | a | c | c | a | c | c | b | c | c | a | e | b | c | c |
| I | b | a | c | d | d | b | c | b | a | c | e | b | b | c | a | e | b | b | c |
| J | b | a | c | d | d | c | c | b | a | c | e | b | d | c | c | e | b | c | c |
| K | b | c | c | d | b | c | b | b | a | d | g | b | d | b | a | e | b | c | c |
| L | c | a | d | d | d | a | c | b | d | c | f | b | c | c | c | e | b | b | c |
| M | d | a | c | d | d | c | c | b | a | c | e | b | e | b | a | e | b | b | c |
| N | d | a | c | d | d | c | c | b | e | c | c | b | e | c | b | e | b | b | a |
| O | e | a | c | d | d | a | c | d | a | c | f | b | a | a | a | e | b | b | c |
| P | b | d | b | d | a | a | c | b | b | c | a | b | e | a | a | e | d | c | a |
| Q | e | a | c | d | d | a | c | b | a | d | f | b | b | c | c | e | b | c | c |
| R | b | a | c | d | d | a | d | b | d | c | e | b | a | b | a | e | d | c | c |
| S | b | c | c | d | a | b | d | b | a | d | b | b | d | c | c | d | b | c | c |
| T | c | c | b | e | c | a | c | b | c | d | b | b | d | c | e | e | f | c | c |
| U | c | c | c | d | c | d | d | d | a | b | c | c | e | a | e | e | b | c | c |
| V | b | c | c | d | b | a | d | d | d | a | e | a | e | b | e | e | c | c | a |
| W | b | c | b | f | c | e | c | b | a | a | c | d | e | b | a | e | d | c | a |
| Key | b/d | a | c | d | d | a | c | b | a | c | f | b | d | c | a | e | c | c | c |
| No. correct | 17 | 13 | 17 | 21 | 12 | 9 | 18 | 16 | 16 | 13 | 5 | 16 | 6 | 12 | 11 | 22 | 1 | | |
| Related course | 601 | 541 | 560 | 560 | 221 etc | 625 | 625 | 655 | 655 | 660 | 660 | 670 | 670 | 675 | 680 | 680 | 680 | | |

Question 1 was about the ACM Code. Interestingly, the correct answer to the question depends on whether we are talking about the code for CS professionals or for software engineers. In counting how many students got this question correct, we have counted both of these answers as correct.

Questions 18 and 19 are not technical questions but rather questions about the test itself; hence there are no right or wrong answers for these questions. For each of these questions, the "key" row simply lists the answers picked by the largest number of students.

The questions on the test: The questions on the POCAT are designed to help assess the degree to which specific program outcomes were achieved by BS-CSE students as they near completion of the program. The topics that the questions are based on are from the required high-level courses (CSE 541, 560, 601, 625, 655, 660, 670, 675, 680). But they are not the typical questions you might find in, say, the final exams of those courses. Instead, they are more conceptual and are intended to see how well students understand key concepts from across the curriculum and possibly apply them in new situations.

Each question on POCAT is a multiple-choice question. Each question has, as one possible answer, something along the lines of “I have no idea”. Students are asked to choose that if they really don’t have any idea how to answer the question; if, on the other hand, they are not sure of the answer but can make an informed guess, they are asked to do so. There are also a couple of additional questions at the end that ask for the students’ opinions on the test (such as its length, level of difficulty, etc.)

Relation to EC Criterion 3 Outcomes: The questions on POCAT help assess the degree of achievement of EAC Outcomes 3.a, 3.b, 3.c, 3.e, 3.f, and 3.k. There were 17 questions on the test administered during Winter ’06. The following table lists the numbers of the questions in the test that correspond to each of these outcomes.

| Cr. 3 Outcome | Related questions |
|---------------|--|
| 3.a | 2, 3, 6, 7, 8, 9, 11, 12, 16, 17 |
| 3.b | 2, 3, 9, 11, 12, 14, 16 |
| 3.c | 5, 10, 11, 14, 15 |
| 3.e | 2, 3, 5, 7, 12, 15, 16 |
| 3.f | 1 |
| 3.k | 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 |