

# BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

## DIAGNOSTIC REPORTS FOR STATE EXAMINATIONS

For those who have questions regarding the information contained in the Diagnostic Reports that are provided to candidates who did not receive a passing score on a state exam, the following will provide definitions of some of the terms in the reports; the rationale for identifying candidate performance; and an explanation regarding why this diagnostic report format was chosen for California State Exam candidates.

### Measurement Terms:

- **Proficient** - A proficient rating means that the candidate answered enough questions correctly in that test plan category to have knowledge above the level of minimal competence.
- **Marginal** - A marginal rating means that the candidate answered enough questions correctly in that test plan category to have knowledge that is at the level of minimal competence but should still review these areas when studying for future exams.
- **Deficient** - A deficient rating means that the candidate did not answer enough questions correctly in that test plan category to reach the level of minimal competence and needs significant review in these areas when studying for future exams.

### How measurements are applied to candidates' performance.

Following is a sample test plan and an example exam where there were 100 questions given.

Sample test plan with 100 questions scored for an exam:

Area I: 6% - 6 questions

Area II: 17% - 17 questions

Area III: 25% - 25 questions

Area IV: 34% - 34 questions

Area V: 18% - 18 questions

Each question has equal value and the cut-score for this example was determined to be 65 correct answers (65%). The cut-score is generally different for **each type of exam and exam administration**. Each cut-score is based on minimal competence for the specific exam.

Here is an example of the breakdown of a candidate's performance (points) in each of the sample test plan categories with the number of points possible and the rating received:

Example Diagnostic Report		
Test Plan Area	Percent of Test	Your Performance
Area I	6%	Proficient
Area II	17%	Marginal
Area III	25%	Marginal
Area IV	34%	Deficient
Area V	18%	Deficient

Example Scores (Not Provided to Candidates)
5 of 6
11 of 17
17 of 25
15 of 34
10 of 18

Minimal Competence (Marginal) is generally determined by applying the percentage of items for the overall cut score to each test plan category. For smaller categories there is generally only one possible score at this level and for larger ones there are usually between 2 to 4 score points.

It would not be helpful to give ranges or scores since it will change with each test administration and is based on the cut-score of each specific exam.

### Why Choose this Diagnostic Report Format

This particular style of Diagnostic Report was chosen because it clearly identifies the areas where a candidate needs to demonstrate improvement before they will achieve licensure. It is important to note that a candidate does NOT need to achieve a score of "Marginal" in each area to obtain licensure. For example, in the scores shown above, if the candidate would have received 22 of a possible 34 points in Area IV, the total score would have reached the required score of 65%, and the candidate would have passed the exam, even though they were still "Deficient" in Area V.

Because the professional licenses issued by BPELSG allow broad based practice, it can be difficult for unsuccessful candidates with limited practice experience to achieve a passing score without identifying the areas that they need to better demonstrate minimal competence. In the example above, the candidate performance was only proficient in one area of practice and marginal in two other areas of practice. As a result, the candidate can compare their performance to the published Test Plan for this exam and determine where they need additional experience and/or education.

Exams for professional licensure are intended to measure the application of education and experience to real world situations. Generally, problems are designed to measure a candidates' decision when the laws and principles of the practice are applied to a particular problem that the candidate will encounter within the authority of the particular practice.