

ADA American Dental Association®

Dental Admission Test (DAT) User Manual

DENTAL ADMISSION TEST (DAT) USER'S MANUAL

2023

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INTRODUCTION

History of the Dental Admission Test Program

The development of the Dental Admission Test Program began in 1945. At that time, there were 39 accredited dental schools in the United States, and 12,000 students were enrolled. There were three basic reasons for the development of the Dental Aptitude Test Battery, as it was known at that time. One was the high rate of student attrition over the four years of dental school. It was estimated that 20% to 25% of the national first-year class withdrew from dental school before graduation. It was anticipated that the aptitude test data employed by the admission committees in the selection of new students would reduce the number of students withdrawing because of poor scholarship.

Another reason for developing the testing program was that veterans of World War II were beginning to apply to dental school in great numbers, and the schools were concerned at the prospect of making comparisons among educational records that were several years old with the more recent records of non-veterans. It was believed that veterans could be more accurately appraised through the use of both educational records and recent test scores. This leads to the third reason for developing the testing program. The dental school admission officers were aware that the grades from the various high schools and colleges had different meanings with regard to educational achievement, and it was thought that by using a national test, a common yardstick could be used to compare students' achievements.

In 1945, the committee that was developing the Dental Aptitude Test Battery was looking at the possibility of measuring students' ability to read and comprehend, to memorize verbal and visual material, to recognize word meaning, to reason, to visualize patterns, to express information orally, and to demonstrate manual dexterity. The committee was also interested in the possibility of measuring a student's interest, personality, perseverance, and social instincts. To the credit of that committee, the list was greatly reduced when the test battery was made definitive. The Dental Aptitude Test Battery was initiated as an instrument to measure basic abilities in mathematics, verbal reasoning, reading comprehension in the sciences, and academic achievement in the natural sciences. The committee also included tests of object visualization and chalk carving.

With some exceptions, the types of tests given in the testing program have remained rather consistent through the years. In 1972, an organic chemistry test was added to the Survey of the Natural Sciences, and the Chalk Carving Test was replaced by the Perceptual-motor Ability Test. Prior to 1972, the Chalk Carving Test and Space Relations Test provided information related to manual dexterity as well as the ability to visualize in three dimensions. For various reasons, including the difficulty and costliness of administering a manual test on a national basis, the Chalk Carving Test was replaced by the Perceptual-motor Ability Test. Validation studies (Graham, 1972, 1974) comparing Chalk Carving Test scores and paper and pencil Perceptual-motor Ability Test scores with dental school performance in technique courses indicated that the paper and pencil test scores were as valid as the Chalk Carving Test in predicting performance.

Four principles were established as desirable in developing the Perceptual-motor Ability Tests. In short, the tests must be: 1) suitable for group administration, 2) non-manual-performance-based, 3) of high reliability and not subject to practice effects, and 4) ability measures that discriminate between technical and non-technical proficiency. The underlying factor that permitted the replacement of the Chalk Carving Test with the Perceptual-motor Ability Test was that visual perception, when measured reliably through a pencil-and-paper test, would serve as a valid predictor for judging the probability of success in the technique courses required within the dental curriculum.

In 1981, the format of the test was once again changed to include only a test of quantitative reasoning ability, a test to measure reading comprehension ability, a perceptual ability test, and a survey of the natural sciences, which measured achievement in biology, general chemistry, and organic chemistry. The Verbal Reasoning Test was dropped because there had been little evidence of any significant positive relationship with dental school performance. The two perceptual tests were combined into one, including those parts having the highest positive correlations with technique courses in the annual validity studies.

In October 1988, the standard score scale that was used to report the results of the DAT was changed from the '-1' to '9' scale to the present '1' to '30' scale. The 1 to 30 standard score scale is based on the log ability scale defined by the Rasch Model (Rasch, 1960, 1980; Wright, 1977; and Wright & Stone, 1979) for dichotomous item responses. Beginning with the October 1988 test administration, results for all tests on the battery except the Reading Comprehension Test were equated to the October 1986 ability scale using the Rasch common item equating procedure. The Reading Comprehension Test could not be equated at that time because all of the items were dependent on a single long passage, which is inappropriate for the common item equating technique. Beginning in March 1989, the format of the Reading Comprehension Test was modified to include three shorter passages with 16 to 17 items associated with each passage. This format allowed for the use of the common item equating technique. Beginning with the October 1989 test administration, all of the reading comprehension standard scores were equated to the April 1989 ability scale.

Content of the Dental Admission Test

There are four individual tests contained in the Dental Admission Test (DAT) battery. The first is the Survey of the Natural Sciences (SNS). The SNS is an achievement test that evaluates examinees' knowledge of material typically taught in undergraduate science courses. The SNS consists of 100 multiple-choice items divided into three sections: 40 items involving basic biology, 30 items involving general chemistry, and 30 items involving organic chemistry. The content specifications for these three sections are listed in Figures 1 to 3. When the SNS is scored, separate scores are given for each of the subtests as well as an overall score for the SNS as a whole.

The second test is the Perceptual Ability Test (PAT). The PAT consists of 90 two-dimensional and three-dimensional problems. The PAT evaluates several of the major factors commonly identified in studies of perceptual or spatial ability (i.e., angle discrimination, block counting, paper folding, form development, and two forms of object visualization). The form development, paper folding, and object visualization factors relate almost exclusively to form perception. It has been demonstrated, especially in industrial psychology, that factors central to one's ability to visually perceive small differences are valuable in selecting applicants who need fine manual dexterity.

The third test is the Reading Comprehension Test (RCT). The RCT consists of 50-items and three reading passages of approximately 1,100-1,500 words each. The topics selected for these passages cover aspects of basic science that are taught in an undergraduate curriculum. Each passage is followed by approximately 15 to 20 items that examine the concepts and ideas developed in the passage.

The fourth test is the Quantitative Reasoning Test (QRT). Prior to 1990, the QRT consisted of 50 items, 30 of which were mathematical problems and 20 of which covered applied mathematics. Beginning in spring 1990, the length of the QRT was reduced to 40 items. The test now consists of 30 mathematical problems and 10 applied mathematics problems. The content specifications for the QRT are listed in Figure 4. The number of items was reduced in order to resolve several issues associated with this test (Smith, Kramer, & Kubiak, 1989, 1990). There are no advanced mathematics or calculus problems.

Knowledge of basic mathematics, algebra, data analysis, interpretation and sufficiency, and probability and statistics required of a first-year college student in preparation for college science courses is assumed by the test.

A composite score—the Academic Average—is also included in the score report. The Academic Average is the rounded arithmetic mean of the quantitative reasoning, reading comprehension, biology, and general and organic chemistry standard scores. The four tests in the Dental Admission Test battery take approximately four hours and thirty minutes to complete. Prior to the computerization of the DAT, the written versions were offered twice each year, typically in April and October. The testing period usually started at 8:30 a.m. and ended about 1:00 p.m. With the introduction of the computerized DAT in 1999, the four tests can be taken nearly any day of the year at Prometric Testing Centers located throughout the United States.

Test Construction

The process of DAT content development occurs continuously. Test items for the Survey of the Natural Sciences and Quantitative Reasoning Test are developed by DAT Test Construction Team (TCT) members who are faculty members from accredited colleges and universities. Newly developed items are reviewed by TCTs and pretested in order to garner item performance statistics. After pretesting, the items are reviewed again and revised, if necessary, to ensure they meet established psychometric standards for the test. Perceptual Ability Test and Reading Comprehension Test items are developed by external consultants. These items undergo the same review and pre-testing process outlined above. The pretest items are not included in the scoring of the test.

Test construction teams are also responsible for selecting the items included on each edition of the test. This determination is based on meeting content specifications and various standards of item quality. Item quality is evaluated by considering an item's performance when administered to examinees. Two statistics in particular are of chief interest: the difficulty of the item and its discrimination index.

Item difficulty is represented by the percent of individuals who answered the item correctly. The difficulty level of the item is thus inversely related to the percentage of examinees who answer the item correctly; as this percentage increases the difficulty of the item decreases. In short, the more examinees who answer an item correctly, the less difficult the item. The recommended item difficulty level range for DAT items is between 40 and 89 percent; mean item difficulties tend toward the upper end of this range.

The discrimination index is essentially a point-biserial correlation coefficient. The coefficient associated with an item represents the correlation between scores on that item (correct or incorrect) and the total score on that particular test. A low correlation coefficient (e.g., 0.01) would indicate that the average test score of individuals who answered the item correctly was roughly the same as the average score of individuals who answered the item incorrectly. In this case, item performance would be unrelated to overall test performance, thus indicating that the item does not discriminate and should therefore be discarded. A higher correlation coefficient (e.g., 0.45) would indicate that the item can discriminate successfully between high scoring and low scoring examinees. Items with strong discrimination index values make a meaningful contribution to a test's ability to rank order examinees according to the ability being measured, and they also contribute greatly to the reliability of the test.

Items not having satisfactory difficulty levels or discrimination indices are either revised or discarded.

Scoring the Dental Admission Test

Each test in the DAT battery yields a raw score, which is the sum of the examinee's correct answers. The raw score is converted to a standard score so that it is possible to compare an examinee's performance across different editions of the examination.

Since the adoption of the Rasch psychometric model by the DAT program in 1988, each test within the DAT battery contains a set of anchor items which has been used in previous administrations of the test. The Rasch difficulty parameters for these items are used to equate the test. The conversion of raw scores to the standard score scale is based on the underlying log ability scale used by the Rasch psychometric model (Rasch, 1960; Wright, 1977; Wright & Stone, 1979). The log ability scale offers several advantages. First, it makes no assumptions about the underlying distribution of scores. Second, person ability and item difficulty are on a common metric that enables interpretation of log abilities in terms of the skills or tasks represented on the tests. Third, the log ability scale is an interval scale by nature. This means that the amount of ability represented by the difference between the scores of 3 and 4 is the same as the amount of ability represented by the difference between the scores of 16 and 17. A complete description of the new standard score scale can be found in Smith, Kramer, and Kubiak (1988), and a description of equating procedures can be found in Larkin (1992).

Because the current standard score scale was first used with the October 1988 test edition, the cumulative frequency distributions for the October 1988 test results are provided in order to facilitate comparison among groups (See Tables 1-8). For the Reading Comprehension Test, the cumulative frequency distribution for the base year (i.e., April 1989) for that test is presented. Frequency distributions for other years are also supplied in the same tables, to facilitate comparison.

Sources of Validity Evidence for the Dental Admission Testing Program

For any testing program, validity is the most important consideration. Validity refers to the degree to which logic and evidence support the use of test scores for making critical decisions, such as admission of examinees to dental education programs. National testing standards provide useful guidance to testing organizations that can help improve validation efforts. It is important to follow these standards and provide the corresponding evidence. Sources of validity evidence for the DAT include reliability evidence, content validity evidence, and external correlational evidence.

Reliability Evidence

Reliability refers to the extent to which test scores are free from random sources of measurement error, providing consistent, stable, and precise measurement (e.g., yielding the same results from one test administration to another). Reliability can be assessed using a variety of methods, each of which is sensitive to different sources of error. For purposes of the DAT Program, a measure of internal consistency reliability, KR_{20} , is used for the discipline-based scores, and a composite reliability estimate is calculated for the Academic Average. Reliability estimates for the DAT score for 2023 are provided below.

DAT Score Reliability: 2023 Administrations

Score	Reliability
Academic Average	.94 to .96
Survey of the Natural Sciences	.92 to .95
Perceptual Ability Test	.90 to .93
Reading Comprehension Test	.75 to .82
Quantitative Reasoning Test	.80 to .89

Note. The table provides the range of reliability coefficients calculated across examination forms.

Content Validity Evidence

Content relevance and representativeness, narrowly defined, refers to the quality of the sample of content from a specific content domain. It is based on professional judgments about test content and the content domain. For example, content found in the DAT's Survey of the Natural Sciences covers a content domain that includes general biology, and general and organic chemistry as typically presented in the undergraduate curriculum in pre dental courses. For the Dental Admission Test battery, content validity evidence is assessed primarily by the evaluation and judgment of TCT members, who are subject matter experts. TCT members judge the appropriateness, relevance, and representativeness of test content relative to the content domain. Reading Comprehension content validity assessment is a collaborative process between basic science undergraduate faculty and experts in reading comprehension passage development and item writing.

External Correlational Evidence

External correlational evidence is also obtained to determine the extent to which important outcomes can be predicted from test performance. For example, test performance should be related to future performance in dental school. Correlational evidence can also be useful in enhancing one's understanding of the psychological constructs involved, and the relationship among similar and dissimilar constructs as they are assessed via different methods (Messick, 1989, pp. 16-46).

The Department of Testing Services uses meta-analytic techniques to study the relationship between DAT scores and dental school grades. In contrast to the early days of the DAT Program, there are currently far more individuals that complete the DAT, and far more schools with dental education programs. In the 2022-2023 academic year, there were 70 fully operational, accredited dental schools in the United States. Among these, 69 dental schools had 26,596 students enrolled. Table 10 presents the corrected correlation coefficients generated from the most recent meta-analysis involving a sampling of these schools. The correlations indicate that DAT scores are positively correlated with performance in the first year of dental school.

Other Information Available Regarding the Dental Admission Test

- A. *Dental Admission Test (DAT) 2023 Program Guide*. This publication provides policies and procedures related to the administration of the DAT, along with information concerning content specifications and preparation materials.
- B. *Dental Admission Test Validity Study 2020-2022 Data*. This is the most recent validity study for the DAT. This study examined the empirical relationship between various predictors (i.e., DAT scores and pre dental GPAs) and student performance during the first two years of dental school.
- C. *Dental Admission Test (DAT) Examinee Information 2023*. This report provides general information concerning the self-reported demographic characteristics of individuals who participated in the testing program. The information is presented at an aggregate level, and includes breakdowns based on the following: gender, ethnicity, parents' income/ occupations/ethnicity, undergraduate major, GPA, and whether the examinee took a review course.
- D. *The DAT and ADAT Programs: Overview of Policies and Procedures Supporting and Promoting Fairness*. This report describes the policies and procedures undertaken in support of the fairness of the Dental Admission Test (DAT) and the Advanced Dental Admission Test (ADAT).

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Table 1
Dental Admission Test
Quantitative Reasoning
Cumulative Percentile Distribution

Score	October 1988 †		2013		2018		2023	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
8	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.1
9	0.1	0.3	0.1	0.2	0.2	0.3	0.1	0.2
10	0.6	0.8	0.3	0.5	0.4	0.7	0.3	0.4
11	1.7	2.5	0.9	1.4	1.0	1.7	1.0	1.5
12	5.2	7.7	1.7	3.1	1.8	3.5	2.2	3.6
13	9.8	17.5	3.8	7.0	4.3	7.8	4.0	7.7
14	12.6	30.2	7.1	14.1	5.9	13.7	5.5	13.2
15	16.1	46.3	10.2	24.3	10.3	23.9	8.6	21.8
16	19.3	65.6	14.9	39.2	11.8	35.8	11.0	32.8
17	12.1	77.7	14.4	53.6	10.9	46.6	11.9	44.6
18	9.2	86.9	12.3	65.9	13.1	59.7	11.5	56.1
19	8.1	94.9	12.5	78.3	11.0	70.7	11.3	67.4
20	2.0	96.9	7.3	85.6	7.7	78.4	8.3	75.7
21	1.9	98.8	6.7	92.3	5.3	83.7	7.3	83.0
22	0.6	99.4	3.4	95.6	5.3	89.0	5.1	88.1
23	0.2	99.7	1.1	96.7	3.6	92.6	3.8	91.8
24	0.3	100.0	1.8	98.5	2.4	95.0	3.5	95.4
25	0.0	100.0	0.2	98.6	1.9	97.0	0.4	95.8
26	0.0	100.0	0.6	99.3	0.6	97.6	0.5	96.3
27	0.0	100.0	0.3	99.6	1.1	98.7	1.7	98.1
28	0.0	100.0	0.0	99.6	0.3	98.9	0.5	98.5
29	0.0	100.0	0.0	99.6	0.0	98.9	0.0	98.5
30	0.0	100.0	0.4	100.0	1.1	100.0	1.5	100.0
Mean	15.75		17.47		18.06		18.29	
SD	2.39		2.96		3.56		3.67	
Count*	2630		12947		12456		15402	

† Base Exam

* Number of examinations given to examinees

Table 2
Dental Admission Test
Reading Comprehension
Cumulative Percentile Distribution

Score	April 1989 †		2013		2018		2023	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
10	0.1	0.2	0.0	0.1	0.1	0.1	0.1	0.1
11	0.8	1.0	0.1	0.1	0.2	0.2	0.1	0.3
12	1.2	2.2	0.3	0.4	0.3	0.6	0.4	0.6
13	2.1	4.3	0.8	1.3	0.6	1.2	0.7	1.4
14	3.6	7.9	1.9	3.1	1.4	2.6	1.4	2.7
15	8.6	16.5	3.9	7.1	3.6	6.2	3.5	6.2
16	9.7	26.2	6.8	13.8	4.6	10.8	4.9	11.1
17	13.1	39.3	10.2	24.1	6.6	17.4	7.2	18.3
18	15.7	55.0	12.5	36.5	8.6	26.0	9.4	27.7
19	15.4	70.4	14.7	51.2	12.1	38.1	12.8	40.6
20	12.8	83.2	13.1	64.3	12.2	50.3	11.0	51.6
21	7.0	90.2	12.5	76.8	14.9	65.2	15.6	67.1
22	5.7	95.9	10.4	87.2	7.7	72.9	11.4	78.5
23	1.6	97.4	4.6	91.8	9.7	82.7	6.5	85.0
24	1.1	98.5	3.8	95.6	4.4	87.1	4.0	89.0
25	0.7	99.2	2.4	98.0	5.7	92.8	4.1	93.1
26	0.6	99.9	1.0	99.0	2.6	95.4	2.4	95.5
27	0.0	99.9	0.3	99.2	0.9	96.3	2.0	97.4
28	0.1	100.0	0.6	99.8	1.3	97.6	0.6	98.1
29	0.0	100.0	0.0	99.8	0.9	98.5	0.0	98.1
30	0.0	100.0	0.2	100.0	1.5	100.0	1.9	100.0
Mean	18.12		19.51		20.58		20.38	
SD	2.70		2.84		3.40		3.33	
Count*	2255		12947		12456		15402	

† Base Exam

* Number of examinations given to examinees

Table 3
Dental Admission Test
Biology
Cumulative Percentile Distribution

Score	October 1988 †		2013		2018		2023	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.1
9	0.7	1.0	0.0	0.0	0.0	0.1	0.1	0.1
10	2.1	3.1	0.2	0.2	0.1	0.2	0.3	0.4
11	4.6	7.7	0.5	0.7	0.4	0.6	0.7	1.1
12	9.5	17.2	1.0	1.7	1.1	1.7	1.9	3.0
13	12.2	29.4	2.7	4.4	1.9	3.6	3.6	6.6
14	13.4	42.9	5.2	9.6	4.2	7.8	5.2	11.8
15	16.3	59.1	7.4	17.0	8.7	16.5	7.6	19.4
16	10.6	69.8	12.3	29.3	10.5	27.0	9.2	28.6
17	14.0	83.8	14.5	43.9	11.5	38.5	11.6	40.2
18	7.4	91.2	13.9	57.8	13.5	52.0	11.1	51.3
19	4.3	95.5	13.3	71.1	14.0	66.1	10.9	62.2
20	1.7	97.2	12.0	83.1	11.0	77.1	9.5	71.7
21	1.4	98.6	5.9	89.0	8.6	85.8	8.6	80.3
22	0.8	99.4	5.2	94.3	6.2	92.0	5.5	85.8
23	0.3	99.6	2.5	96.8	2.7	94.7	4.6	90.4
24	0.0	99.6	1.5	98.3	2.1	96.8	2.9	93.3
25	0.3	99.9	0.7	98.9	1.1	97.9	2.7	96.1
26	0.0	99.9	0.7	99.6	0.9	98.8	0.8	96.8
27	0.0	99.9	0.1	99.7	0.2	99.1	1.9	98.7
28	0.1	100.0	0.2	99.9	0.6	99.6	0.0	98.7
29	0.0	100.0	0.0	99.9	0.0	99.6	0.0	98.7
30	0.0	100.0	0.1	100.0	0.4	100.0	1.3	100.0
Mean	15.05		18.05		18.44		18.64	
SD	2.66		2.81		3.05		3.66	
Count*	2630		12947		12456		15402	

† Base Exam

* Number of examinations given to examinees

Table 4
Dental Admission Test
General Chemistry
Cumulative Percentile Distribution

Score	October 1988 †		2013		2018		2023	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1
2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
4	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
7	0.2	0.3	0.0	0.0	0.0	0.1	0.0	0.1
8	0.0	0.3	0.0	0.0	0.1	0.1	0.1	0.2
9	1.1	1.3	0.1	0.1	0.1	0.2	0.1	0.3
10	1.5	2.9	0.3	0.5	0.3	0.6	0.6	1.0
11	4.9	7.7	0.5	1.0	0.6	1.2	1.5	2.4
12	8.9	16.6	1.5	2.5	1.3	2.5	2.2	4.7
13	10.3	26.9	3.1	5.6	2.9	5.4	4.8	9.5
14	12.9	39.8	5.6	11.2	4.9	10.3	4.8	14.3
15	12.9	52.7	6.9	18.1	7.7	17.9	8.7	23.1
16	11.6	64.3	9.0	27.1	9.0	26.9	9.4	32.5
17	10.6	74.9	12.0	39.1	9.0	35.8	10.8	43.3
18	9.9	84.8	14.3	53.4	11.1	47.0	9.5	52.8
19	4.5	89.3	10.2	63.6	13.2	60.1	11.6	64.4
20	3.2	92.5	11.8	75.4	10.6	70.7	8.6	73.0
21	3.4	95.9	7.9	83.3	6.8	77.5	7.7	80.7
22	2.1	98.1	6.4	89.6	8.1	85.6	6.3	87.0
23	1.1	99.1	4.0	93.7	2.9	88.6	4.5	91.5
24	0.0	99.1	2.1	95.8	5.1	93.6	3.3	94.8
25	0.0	99.1	1.6	97.4	0.9	94.6	1.0	95.8
26	0.7	99.8	1.1	98.5	2.4	97.0	1.5	97.2
27	0.0	99.8	0.0	98.5	0.0	97.1	1.2	98.4
28	0.0	99.8	0.5	99.0	1.8	98.9	0.1	98.6
29	0.2	100.0	0.7	99.7	0.3	99.2	0.0	98.6
30	0.0	100.0	0.3	100.0	0.8	100.0	1.4	100.0
Mean	15.54		18.47		18.89		18.35	
SD	3.14		3.32		3.69		3.82	
Count*	2630		12947		12456		15402	

† Base Exam

* Number of examinations given to examinees

Table 5
Dental Admission Test
Organic Chemistry
Cumulative Percentile Distribution

Score	October 1988 †		2013		2018		2023	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1
2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
3	0.2	0.3	0.0	0.0	0.0	0.1	0.0	0.1
4	0.0	0.3	0.0	0.0	0.0	0.1	0.0	0.1
5	0.0	0.3	0.0	0.1	0.0	0.1	0.0	0.1
6	0.2	0.4	0.0	0.1	0.0	0.1	0.0	0.1
7	0.4	0.8	0.0	0.1	0.0	0.1	0.1	0.2
8	0.5	1.4	0.0	0.1	0.0	0.2	0.1	0.3
9	3.2	4.6	0.2	0.3	0.1	0.3	0.4	0.8
10	2.9	7.5	0.4	0.7	0.6	0.9	0.9	1.7
11	7.6	15.1	1.4	2.1	1.2	2.1	1.3	3.0
12	10.2	25.2	1.8	3.9	2.1	4.2	3.8	6.7
13	16.0	41.3	3.6	7.4	4.0	8.2	4.4	11.1
14	11.3	52.6	5.9	13.3	5.0	13.2	6.3	17.3
15	10.3	62.9	8.1	21.4	7.1	20.3	10.0	27.4
16	14.3	77.1	10.6	32.0	7.8	28.1	7.5	34.9
17	4.4	81.5	11.6	43.6	8.2	36.3	9.9	44.8
18	7.6	89.2	8.6	52.2	9.7	46.0	11.5	56.2
19	3.4	92.6	12.7	64.9	12.0	58.0	8.5	64.8
20	2.3	94.9	9.4	74.3	7.8	65.8	10.7	75.5
21	2.3	97.2	9.3	83.6	8.6	74.4	7.0	82.5
22	1.6	98.8	4.8	88.3	7.9	82.3	6.0	88.5
23	0.0	98.8	3.9	92.2	7.8	90.1	2.4	90.9
24	1.0	99.8	1.8	94.0	1.3	91.4	2.8	93.6
25	0.0	99.8	3.1	97.1	2.1	93.5	1.6	95.3
26	0.0	99.8	0.6	97.7	3.2	96.7	2.1	97.3
27	0.2	100.0	0.6	98.3	0.8	97.5	1.1	98.5
28	0.0	100.0	0.7	99.0	0.1	97.6	0.0	98.5
29	0.0	100.0	1.0	100.0	0.9	98.5	0.0	98.5
30	0.0	100.0	0.0	100.0	1.5	100.0	1.5	100.0
Mean	14.58		18.33		18.94		18.11	
SD	3.25		3.60		4.02		3.98	
Count*	2630		12947		12456		15402	

† Base Exam

* Number of examinations given to examinees

Table 6
Dental Admission Test
Survey of the Natural Sciences
Cumulative Percentile Distribution

Score	October 1988 †		2013		2018		2023	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0
10	1.1	1.2	0.1	0.1	0.0	0.1	0.1	0.1
11	4.0	5.2	0.3	0.3	0.3	0.4	0.6	0.8
12	7.7	13.0	0.9	1.3	1.0	1.4	2.0	2.8
13	12.5	25.4	2.2	3.5	2.2	3.6	3.8	6.6
14	18.4	43.8	5.3	8.8	4.6	8.2	5.6	12.2
15	14.3	58.1	8.6	17.3	7.5	15.7	8.9	21.1
16	14.0	72.2	11.0	28.3	9.7	25.4	9.7	30.8
17	11.4	83.5	14.3	42.6	11.4	36.8	12.0	42.8
18	7.7	91.3	14.0	56.6	12.9	49.7	11.4	54.1
19	5.0	96.3	14.7	71.4	13.6	63.3	11.3	65.4
20	1.5	97.8	10.2	81.5	11.4	74.7	10.1	75.5
21	1.1	98.9	7.7	89.2	9.1	83.8	8.0	83.4
22	0.8	99.6	5.5	94.7	6.8	90.6	5.9	89.3
23	0.1	99.7	2.5	97.2	4.1	94.6	4.3	93.7
24	0.2	99.8	1.4	98.5	2.6	97.2	2.7	96.3
25	0.1	99.9	0.7	99.2	1.2	98.4	1.3	97.6
26	0.1	100.0	0.4	99.7	0.7	99.2	0.9	98.5
27	0.0	100.0	0.1	99.8	0.4	99.6	0.7	99.2
28	0.0	100.0	0.1	99.9	0.2	99.8	0.4	99.6
29	0.0	100.0	0.0	99.9	0.1	99.9	0.0	99.7
30	0.0	100.0	0.1	100.0	0.1	100.0	0.3	100.0
Mean	15.14		18.10		18.57		18.30	
SD	2.43		2.73		3.02		3.34	
Count*	2630		12947		12456		15402	

† Base Exam

* Number of examinations given to examinees

Table 7
Dental Admission Test
Perceptual Ability
Cumulative Percentile Distribution

Score	October 1988 †		2013		2018		2023	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
10	0.2	0.3	0.1	0.1	0.0	0.0	0.1	0.1
11	1.4	1.7	0.3	0.5	0.2	0.2	0.2	0.3
12	3.4	5.1	0.9	1.4	0.6	0.8	0.7	1.0
13	7.6	12.7	2.2	3.6	1.4	2.2	2.1	3.1
14	14.3	27.0	3.1	6.7	2.5	4.7	3.6	6.8
15	14.5	41.5	6.4	13.1	5.6	10.3	5.7	12.5
16	18.4	59.8	7.8	20.9	7.6	17.9	8.9	21.4
17	10.9	70.8	11.3	32.2	10.2	28.1	10.7	32.1
18	11.2	81.9	13.8	46.0	12.4	40.5	15.1	47.2
19	8.1	90.0	15.2	61.2	15.1	55.6	14.4	61.6
20	4.1	94.1	12.8	74.0	12.7	68.2	11.7	73.3
21	2.7	96.8	9.6	83.6	10.5	78.7	10.8	84.2
22	1.4	98.2	8.0	91.7	8.7	87.4	6.5	90.7
23	1.0	99.2	4.1	95.8	5.5	92.8	4.8	95.5
24	0.5	99.7	2.4	98.2	3.3	96.1	2.0	97.5
25	0.2	99.9	1.0	99.2	1.6	97.7	1.7	99.2
26	0.1	100.0	0.5	99.7	1.2	99.0	0.4	99.7
27	0.0	100.0	0.2	99.9	0.2	99.1	0.1	99.8
28	0.0	100.0	0.0	99.9	0.3	99.4	0.1	99.9
29	0.0	100.0	0.0	99.9	0.5	99.9	0.0	99.9
30	0.0	100.0	0.1	100.0	0.1	100.0	0.1	100.0
Mean	16.21		18.72		19.21		18.74	
SD	2.58		2.83		2.96		2.83	
Count*	2630		12947		12456		15402	

Base Exam

* Number of examinations given to examinees

Table 8
Dental Admission Test
Academic Average
Cumulative Percentile Distribution

Score	October 1988 †		2013		2018		2023	
	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent	Percent	Cumulative Percent
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
10	0.4	0.5	0.0	0.0	0.1	0.1	0.0	0.1
11	1.7	2.1	0.1	0.1	0.1	0.2	0.1	0.2
12	5.2	7.3	0.6	0.7	0.5	0.7	0.8	1.0
13	11.3	18.7	1.3	2.0	1.2	1.9	2.2	3.2
14	16.0	34.6	3.1	5.1	3.1	5.0	4.0	7.2
15	16.9	51.5	6.6	11.7	5.5	10.5	6.8	14.1
16	16.7	68.2	11.2	22.9	8.9	19.3	9.8	23.8
17	12.8	81.0	14.1	37.0	11.3	30.6	11.7	35.5
18	9.7	90.6	15.9	53.0	14.0	44.6	13.3	48.8
19	5.0	95.7	15.5	68.4	14.1	58.7	12.7	61.5
20	2.3	97.9	12.9	81.3	12.7	71.5	11.4	72.9
21	1.4	99.4	8.4	89.8	9.9	81.4	9.3	82.2
22	0.4	99.8	5.2	95.0	7.3	88.7	6.3	88.4
23	0.2	99.9	2.9	97.9	5.1	93.8	4.5	93.0
24	0.1	100.0	1.2	99.1	3.1	96.9	3.0	96.0
25	0.0	100.0	0.6	99.7	1.8	98.7	1.8	97.7
26	0.0	100.0	0.2	99.9	0.9	99.5	1.3	99.1
27	0.0	100.0	0.1	100.0	0.3	99.9	0.6	99.6
28	0.0	100.0	0.0	100.0	0.1	100.0	0.3	99.9
29	0.0	100.0	0.0	100.0	0.0	100.0	0.1	100.0
30	0.0	100.0	0.0	100.0	0.0	100.0	0.0	100.0
Mean	15.53		18.36		18.98		18.76	
SD	2.24		2.47		2.84		3.06	
Count*	2630		12947		12456		15402	

† Base Exam

* Number of examinations given to examinees

Table 9
Dental Admission Test
Standard Score Analysis
2023

N = 15,402	Number of Items	Mean	S.D
Quantitative Reasoning	40	18.29	3.67
Reading Comprehension	50	20.38	3.33
Biology	40	18.64	3.66
General Chemistry	30	18.35	3.82
Organic Chemistry	30	18.11	3.98
Survey of the Natural Sciences	100	18.30	3.34
Perceptual Ability	90	18.74	2.83
Academic Average		18.76	3.06

Table 10
First-Year Class
Corrected Correlation Coefficients (Pearson R)
Meta-Analysis Results
School Year 2020-2022

	Biomedical Science	Preclinical Operative Technique	Clinical Science	First Year GPA
Predental GPAs				
Total [†]	0.36	0.29	0.29	0.40
Science [†]	0.39	0.31	0.27	0.41
DAT Scores				
Quantitative Reasoning [‡]	0.26	0.20	0.18	0.27
Reading Comprehension [‡]	0.22	0.16	0.15	0.22
Biology [‡]	0.44	0.26	0.22	0.42
General Chemistry [‡]	0.38	0.22	0.19	0.35
Organic Chemistry [‡]	0.41	0.25	0.20	0.40
Survey of the Natural Sciences [‡]	0.53	0.32	0.26	0.51
Perceptual Ability [‡]	0.24	0.31	0.17	0.31
Academic Average [‡]	0.54	0.37	0.29	0.52
Multiple R				
DAT [†]	0.47	0.37	0.32	0.45
DAT and GPAs [†]	0.55	0.45	0.39	0.54

[†] Correlation is corrected for unreliability in dental school grades.

[‡] Correlation is corrected for range restriction and unreliability in dental school grades.

Table 11
Dental Admission Test
Scores for First Time Test Takers and Repeaters
2023

Subject	First Time Test Takers		Repeaters	
	Mean	Std. Dev.	Mean	Std. Dev.
Quantitative Reasoning	18.77	3.85	17.29	3.03
Reading Comprehension	20.71	3.35	19.67	3.17
Biology	19.03	3.86	17.84	3.05
General Chemistry	18.77	4.03	17.49	3.17
Organic Chemistry	18.57	4.20	17.16	3.28
Survey of the Natural Sciences	18.70	3.54	17.48	2.69
Perceptual Ability	18.92	2.97	18.36	2.48
Academic Average	19.17	3.24	17.90	2.43

Table 12
Dental Admission Test
Quantitative Reasoning by Gender
2023

Score	Females	Males	Total	Count
1	0.0%	0.0%	0.0%	3
2	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	1
7	0.0%	0.0%	0.0%	2
8	0.1%	0.0%	0.0%	6
9	0.1%	0.0%	0.1%	15
10	0.3%	0.2%	0.3%	42
11	1.3%	0.6%	1.0%	157
12	2.9%	1.0%	2.2%	332
13	4.9%	2.7%	4.1%	623
14	6.5%	3.7%	5.5%	844
15	9.8%	6.5%	8.6%	1317
16	12.3%	9.0%	11.1%	1697
17	12.2%	11.4%	11.9%	1819
18	11.2%	12.1%	11.5%	1761
19	11.0%	11.8%	11.3%	1723
20	7.7%	9.3%	8.3%	1272
21	6.5%	8.6%	7.3%	1112
22	4.1%	6.7%	5.1%	773
23	3.3%	4.6%	3.8%	574
24	2.8%	4.7%	3.5%	537
25	0.4%	0.6%	0.4%	67
26	0.4%	0.7%	0.5%	75
27	1.2%	2.7%	1.7%	265
28	0.2%	0.8%	0.5%	71
29	0.0%	0.0%	0.0%	0
30	0.9%	2.3%	1.4%	214
	63.6%	36.4%	100.0%	15302
Mean	17.77	19.15	18.27	
SD	3.49	3.77	3.65	
Count*	9734	5568	15302	

* Number of examinations given to examinees

Table 13
Dental Admission Test
Reading Comprehension by Gender
2023

Score	Females	Males	Total	Count
1	0.0%	0.0%	0.0%	3
2	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0
7	0.0%	0.0%	0.0%	0
8	0.0%	0.0%	0.0%	1
9	0.0%	0.0%	0.0%	4
10	0.1%	0.1%	0.1%	12
11	0.1%	0.1%	0.1%	19
12	0.4%	0.3%	0.4%	56
13	0.7%	0.7%	0.7%	113
14	1.5%	1.2%	1.4%	211
15	3.6%	3.4%	3.5%	533
16	5.1%	4.5%	4.9%	751
17	7.3%	7.2%	7.3%	1112
18	9.9%	8.6%	9.4%	1442
19	13.3%	12.0%	12.8%	1965
20	11.2%	10.6%	11.0%	1686
21	15.3%	16.0%	15.6%	2382
22	10.9%	12.1%	11.4%	1738
23	6.3%	6.8%	6.5%	990
24	3.7%	4.5%	4.0%	613
25	3.6%	4.8%	4.0%	618
26	2.4%	2.3%	2.4%	365
27	1.8%	2.2%	2.0%	304
28	0.5%	0.7%	0.6%	91
29	0.0%	0.0%	0.0%	0
30	1.9%	1.9%	1.9%	293
	63.6%	36.4%	100.0%	15302
Mean	20.27	20.54	20.36	
SD	3.32	3.32	3.32	
Count*	9734	5568	15302	

* Number of examinations given to examinees

Table 14
Dental Admission Test
Biology by Gender
2023

Score	Females	Males	Total	Count
1	0.0%	0.0%	0.0%	3
2	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	1
7	0.0%	0.0%	0.0%	1
8	0.0%	0.0%	0.0%	5
9	0.1%	0.0%	0.1%	9
10	0.3%	0.1%	0.3%	40
11	0.8%	0.6%	0.7%	111
12	2.2%	1.3%	1.9%	290
13	4.1%	2.8%	3.6%	558
14	5.7%	4.2%	5.2%	794
15	8.3%	6.4%	7.6%	1167
16	9.7%	8.3%	9.2%	1410
17	12.1%	10.7%	11.6%	1775
18	11.4%	10.6%	11.1%	1702
19	10.8%	11.2%	10.9%	1670
20	9.0%	10.4%	9.5%	1454
21	8.2%	9.3%	8.6%	1319
22	4.9%	6.5%	5.5%	845
23	3.9%	5.7%	4.5%	695
24	2.5%	3.7%	2.9%	448
25	2.5%	3.1%	2.7%	413
26	0.6%	1.0%	0.8%	116
27	1.6%	2.4%	1.9%	289
28	0.0%	0.0%	0.0%	0
29	0.0%	0.0%	0.0%	0
30	1.0%	1.6%	1.2%	187
	63.6%	36.4%	100.0%	15302
Mean	18.32	19.16	18.63	
SD	3.59	3.69	3.65	
Count*	9734	5568	15302	

* Number of examinations given to examinees

Table 15
Dental Admission Test
General Chemistry by Gender
2023

Score	Females	Males	Total	Count
1	0.1%	0.1%	0.1%	11
2	0.0%	0.0%	0.0%	1
3	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	1
5	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	1
7	0.0%	0.0%	0.0%	4
8	0.1%	0.0%	0.1%	13
9	0.1%	0.1%	0.1%	21
10	0.7%	0.5%	0.6%	99
11	1.7%	1.0%	1.5%	225
12	2.7%	1.4%	2.2%	343
13	5.8%	3.3%	4.9%	745
14	5.5%	3.6%	4.8%	735
15	9.7%	7.1%	8.8%	1341
16	10.1%	8.2%	9.4%	1442
17	11.1%	10.4%	10.9%	1663
18	9.8%	9.0%	9.5%	1456
19	11.2%	12.4%	11.7%	1787
20	7.9%	9.8%	8.6%	1309
21	6.9%	9.1%	7.7%	1181
22	5.7%	7.2%	6.2%	954
23	3.8%	5.8%	4.5%	688
24	2.7%	4.3%	3.3%	502
25	0.9%	1.1%	1.0%	148
26	1.2%	1.8%	1.4%	218
27	0.9%	1.5%	1.2%	176
28	0.2%	0.1%	0.1%	22
29	0.0%	0.0%	0.0%	0
30	1.0%	2.2%	1.4%	216
	63.6%	36.4%	100.0%	15302
Mean	17.92	19.06	18.34	
SD	3.74	3.83	3.81	
Count*	9734	5568	15302	

* Number of examinations given to examinees

Table 16
Dental Admission Test
Organic Chemistry by Gender
2023

Score	Females	Males	Total	Count
1	0.1%	0.1%	0.1%	18
2	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	2
5	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0
7	0.1%	0.0%	0.1%	11
8	0.2%	0.1%	0.1%	21
9	0.6%	0.2%	0.4%	67
10	1.0%	0.7%	0.9%	137
11	1.5%	1.0%	1.3%	199
12	4.1%	3.1%	3.8%	578
13	5.0%	3.3%	4.4%	673
14	7.0%	5.0%	6.3%	961
15	11.0%	8.5%	10.1%	1542
16	8.0%	6.5%	7.5%	1144
17	10.2%	9.5%	9.9%	1519
18	11.8%	11.0%	11.5%	1757
19	8.4%	8.7%	8.5%	1303
20	10.2%	11.6%	10.7%	1639
21	6.6%	7.6%	7.0%	1067
22	5.1%	7.5%	6.0%	914
23	2.0%	2.9%	2.3%	359
24	2.4%	3.5%	2.8%	428
25	1.4%	2.0%	1.6%	249
26	1.6%	2.9%	2.0%	311
27	0.8%	1.7%	1.1%	174
28	0.0%	0.0%	0.0%	0
29	0.0%	0.0%	0.0%	0
30	1.0%	2.3%	1.5%	229
	63.6%	36.4%	100.0%	15302
Mean	17.70	18.79	18.10	
SD	3.85	4.09	3.97	
Count*	9734	5568	15302	

* Number of examinations given to examinees

Table 17
Dental Admission Test
Survey of the Natural Sciences by Gender
2023

Score	Females	Males	Total	Count
1	0.0%	0.0%	0.0%	3
2	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0
7	0.0%	0.0%	0.0%	0
8	0.0%	0.0%	0.0%	0
9	0.0%	0.0%	0.0%	2
10	0.1%	0.1%	0.1%	16
11	0.7%	0.4%	0.6%	97
12	2.4%	1.3%	2.0%	306
13	4.4%	2.8%	3.9%	591
14	6.4%	4.3%	5.6%	861
15	10.0%	7.0%	8.9%	1361
16	10.4%	8.5%	9.7%	1487
17	12.6%	10.9%	12.0%	1840
18	11.6%	11.1%	11.4%	1745
19	10.7%	12.1%	11.2%	1721
20	9.6%	11.0%	10.1%	1542
21	7.2%	9.2%	7.9%	1216
22	5.3%	6.9%	5.9%	900
23	3.6%	5.4%	4.3%	657
24	2.1%	3.6%	2.6%	405
25	1.0%	1.7%	1.3%	196
26	0.7%	1.2%	0.9%	137
27	0.4%	1.1%	0.6%	99
28	0.3%	0.6%	0.4%	66
29	0.0%	0.0%	0.0%	4
30	0.2%	0.5%	0.3%	50
	63.6%	36.4%	100.0%	15302
Mean	17.94	18.90	18.29	
SD	3.25	3.39	3.33	
Count*	9734	5568	15302	

* Number of examinations given to examinees

Table 18
Dental Admission Test
Perceptual Ability by Gender
2023

Score	Females	Males	Total	Count
1	0.0%	0.0%	0.0%	2
2	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0
7	0.0%	0.0%	0.0%	0
8	0.0%	0.0%	0.0%	0
9	0.0%	0.0%	0.0%	2
10	0.1%	0.0%	0.1%	11
11	0.3%	0.1%	0.2%	30
12	0.7%	0.6%	0.7%	107
13	2.6%	1.5%	2.2%	331
14	4.2%	2.7%	3.6%	558
15	6.6%	4.3%	5.8%	882
16	10.2%	6.8%	8.9%	1366
17	11.7%	8.9%	10.7%	1635
18	16.0%	13.6%	15.2%	2319
19	14.4%	14.5%	14.4%	2206
20	11.4%	12.4%	11.7%	1794
21	9.7%	12.8%	10.8%	1657
22	5.2%	8.7%	6.5%	993
23	3.6%	6.8%	4.8%	730
24	1.5%	2.6%	1.9%	295
25	1.2%	2.6%	1.7%	265
26	0.3%	0.6%	0.4%	67
27	0.1%	0.2%	0.1%	21
28	0.1%	0.3%	0.1%	22
29	0.0%	0.0%	0.0%	0
30	0.0%	0.1%	0.1%	9
	63.6%	36.4%	100.0%	15302
Mean	18.39	19.33	18.73	
SD	2.75	2.87	2.83	
Count*	9734	5568	15302	

* Number of examinations given to examinees

Table 19
Dental Admission Test
Academic Average by Gender
2023

Score	Females	Males	Total	Count
1	0.0%	0.0%	0.0%	0
2	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	1
7	0.0%	0.0%	0.0%	3
8	0.0%	0.0%	0.0%	1
9	0.0%	0.0%	0.0%	4
10	0.0%	0.0%	0.0%	5
11	0.1%	0.1%	0.1%	21
12	1.0%	0.4%	0.8%	122
13	2.7%	1.3%	2.2%	337
14	4.8%	2.8%	4.1%	620
15	7.7%	5.3%	6.8%	1048
16	10.9%	7.8%	9.8%	1499
17	12.6%	10.1%	11.7%	1795
18	13.7%	12.6%	13.3%	2038
19	12.4%	13.4%	12.8%	1952
20	10.6%	12.7%	11.3%	1735
21	8.6%	10.5%	9.3%	1422
22	5.5%	7.5%	6.2%	953
23	3.9%	5.5%	4.5%	691
24	2.3%	4.2%	3.0%	457
25	1.4%	2.3%	1.7%	263
26	1.0%	1.7%	1.3%	194
27	0.4%	0.9%	0.5%	84
28	0.1%	0.5%	0.2%	38
29	0.1%	0.2%	0.1%	18
30	0.0%	0.0%	0.0%	1
	63.6%	36.4%	100.0%	15302
Mean	18.39	19.34	18.74	
SD	2.98	3.08	3.05	
Count*	9734	5568	15302	

* Number of examinations given to examinees

Table 20
Dental Admission Test
Quantitative Reasoning by Ethnicity
2023

Score	American Indian	Asian	Native Hawaiian	Black	Multi	White	Total	Count
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
7	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	2
8	0.0%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	6
9	0.0%	0.0%	0.0%	0.4%	0.1%	0.0%	0.1%	12
10	0.0%	0.1%	0.0%	0.7%	0.4%	0.2%	0.3%	37
11	0.0%	0.6%	2.8%	3.2%	2.1%	0.5%	1.0%	145
12	2.9%	0.9%	0.0%	7.4%	3.6%	1.4%	2.1%	309
13	14.5%	2.2%	5.6%	10.0%	7.9%	2.7%	4.0%	585
14	5.8%	3.6%	8.3%	11.7%	8.6%	4.5%	5.5%	803
15	11.6%	6.0%	11.1%	15.9%	11.3%	8.1%	8.6%	1266
16	10.1%	8.2%	13.9%	13.7%	13.9%	11.3%	11.0%	1617
17	10.1%	10.3%	19.4%	12.2%	11.9%	12.9%	12.0%	1756
18	11.6%	10.5%	13.9%	9.2%	11.1%	12.9%	11.6%	1706
19	7.2%	11.3%	11.1%	6.5%	9.3%	12.8%	11.3%	1664
20	11.6%	10.0%	0.0%	3.3%	5.4%	9.2%	8.4%	1229
21	2.9%	9.0%	0.0%	3.0%	4.9%	8.0%	7.4%	1084
22	2.9%	7.5%	0.0%	0.6%	3.1%	4.9%	5.0%	740
23	4.3%	5.8%	5.6%	0.9%	2.1%	3.5%	3.7%	549
24	2.9%	5.6%	2.8%	0.3%	2.0%	3.4%	3.6%	522
25	0.0%	1.0%	5.6%	0.0%	0.1%	0.2%	0.4%	63
26	0.0%	0.9%	0.0%	0.1%	0.1%	0.4%	0.5%	70
27	0.0%	2.9%	0.0%	0.3%	0.9%	1.5%	1.7%	251
28	0.0%	0.9%	0.0%	0.1%	0.2%	0.4%	0.5%	69
29	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
30	1.4%	2.4%	0.0%	0.2%	0.4%	1.3%	1.4%	205
	0.5%	28.6%	0.2%	8.5%	14.1%	48.1%	100.0%	14693
Mean	17.29	19.48	17.33	15.75	16.95	18.44	18.29	
SD	3.51	3.81	3.30	2.86	3.34	3.38	3.63	
Count*	69	4196	36	1255	2067	7070	14693	

* Number of examinations given to examinees

Table 21
Dental Admission Test
Reading Comprehension by Ethnicity
2023

Score	American Indian	Asian	Native Hawaiian	Black	Multi	White	Total	Count
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1
9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3
10	0.0%	0.0%	0.0%	0.2%	0.1%	0.1%	0.1%	12
11	0.0%	0.1%	0.0%	0.2%	0.0%	0.1%	0.1%	15
12	0.0%	0.1%	0.0%	0.5%	0.5%	0.4%	0.3%	49
13	1.4%	0.5%	0.0%	1.9%	1.1%	0.5%	0.7%	106
14	4.3%	1.0%	0.0%	2.3%	2.3%	1.0%	1.3%	195
15	4.3%	2.9%	2.8%	6.5%	4.8%	2.7%	3.4%	495
16	10.1%	4.2%	8.3%	8.5%	6.5%	3.8%	4.8%	698
17	4.3%	6.9%	11.1%	12.7%	8.7%	6.1%	7.2%	1065
18	2.9%	9.4%	16.7%	12.2%	10.4%	8.6%	9.4%	1379
19	18.8%	11.4%	13.9%	16.8%	13.4%	13.0%	13.0%	1906
20	15.9%	11.0%	13.9%	10.5%	10.8%	11.3%	11.1%	1632
21	17.4%	15.8%	8.3%	11.7%	15.5%	16.5%	15.7%	2311
22	8.7%	12.7%	13.9%	6.5%	9.2%	12.2%	11.4%	1675
23	1.4%	7.5%	5.6%	3.5%	5.4%	6.8%	6.5%	955
24	1.4%	4.5%	2.8%	1.9%	3.3%	4.5%	4.1%	602
25	2.9%	4.2%	0.0%	1.6%	3.2%	4.6%	4.0%	592
26	2.9%	2.8%	2.8%	1.0%	1.5%	2.6%	2.4%	347
27	1.4%	1.8%	0.0%	0.7%	1.3%	2.5%	2.0%	289
28	0.0%	0.8%	0.0%	0.2%	0.4%	0.6%	0.6%	86
29	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
30	1.4%	2.2%	0.0%	0.6%	1.3%	2.1%	1.9%	277
	0.5%	28.6%	0.2%	8.5%	14.1%	48.1%	100.0%	14693
Mean	19.65	20.64	19.53	18.90	19.77	20.69	20.39	
SD	3.24	3.30	2.52	2.97	3.24	3.27	3.30	
Count*	69	4196	36	1255	2067	7070	14693	

* Number of examinations given to examinees

Table 22
Dental Admission Test
Biology by Ethnicity
2023

Score	American Indian	Asian	Native Hawaiian	Black	Multi	White	Total	Count
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	1
7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
8	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	5
9	0.0%	0.0%	0.0%	0.2%	0.1%	0.1%	0.1%	8
10	0.0%	0.2%	0.0%	0.9%	0.2%	0.2%	0.3%	37
11	1.4%	0.4%	2.8%	1.8%	1.3%	0.6%	0.7%	106
12	2.9%	1.2%	0.0%	4.9%	3.0%	1.5%	1.9%	282
13	5.8%	2.3%	11.1%	8.7%	5.0%	2.9%	3.6%	526
14	11.6%	4.0%	13.9%	8.8%	6.7%	4.6%	5.1%	755
15	21.7%	6.5%	11.1%	9.7%	8.3%	7.5%	7.6%	1114
16	13.0%	6.7%	8.3%	12.0%	11.4%	9.6%	9.2%	1358
17	5.8%	10.5%	13.9%	12.8%	12.0%	12.0%	11.6%	1709
18	13.0%	10.4%	11.1%	12.2%	12.3%	11.1%	11.2%	1640
19	5.8%	11.1%	8.3%	9.0%	10.7%	11.2%	10.9%	1600
20	8.7%	10.6%	11.1%	5.8%	7.8%	10.1%	9.5%	1403
21	2.9%	9.8%	2.8%	5.4%	7.7%	9.0%	8.7%	1281
22	2.9%	6.8%	2.8%	2.5%	4.2%	5.7%	5.5%	810
23	1.4%	6.0%	0.0%	2.0%	3.0%	4.7%	4.6%	672
24	1.4%	3.8%	0.0%	1.3%	2.5%	2.8%	2.9%	428
25	0.0%	4.3%	2.8%	0.7%	1.0%	2.7%	2.7%	397
26	0.0%	1.0%	0.0%	0.2%	0.7%	0.7%	0.7%	109
27	1.4%	2.7%	0.0%	0.9%	1.2%	1.8%	1.9%	277
28	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
29	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
30	0.0%	1.7%	0.0%	0.2%	0.8%	1.2%	1.2%	173
	0.5%	28.6%	0.2%	8.5%	14.1%	48.1%	100.0%	14693
Mean	16.72	19.42	16.75	16.84	17.87	18.74	18.63	
SD	3.05	3.70	3.02	3.29	3.50	3.53	3.63	
Count*	69	4196	36	1255	2067	7070	14693	

* Number of examinations given to examinees

Table 23
Dental Admission Test
General Chemistry by Ethnicity
2023

Score	American Indian	Asian	Native Hawaiian	Black	Multi	White	Total	Count
1	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.1%	8
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1
3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1
5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1
7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3
8	0.0%	0.0%	0.0%	0.4%	0.1%	0.1%	0.1%	13
9	0.0%	0.0%	0.0%	0.6%	0.3%	0.1%	0.1%	19
10	1.4%	0.3%	0.0%	2.4%	1.2%	0.4%	0.6%	94
11	4.3%	0.7%	5.6%	3.3%	2.4%	1.2%	1.4%	210
12	1.4%	1.5%	5.6%	4.7%	3.3%	1.9%	2.2%	327
13	10.1%	2.9%	2.8%	9.7%	6.8%	4.5%	4.8%	710
14	5.8%	2.9%	8.3%	8.8%	7.1%	4.5%	4.8%	701
15	13.0%	6.3%	16.7%	13.7%	9.8%	8.9%	8.7%	1285
16	18.8%	7.3%	2.8%	13.1%	11.9%	9.2%	9.4%	1376
17	14.5%	9.7%	22.2%	11.8%	10.5%	11.5%	10.9%	1604
18	4.3%	9.2%	5.6%	7.8%	10.4%	10.0%	9.6%	1409
19	8.7%	11.3%	0.0%	8.4%	10.9%	12.6%	11.6%	1707
20	5.8%	10.2%	8.3%	5.1%	7.0%	8.8%	8.6%	1269
21	5.8%	9.9%	8.3%	3.4%	6.1%	7.8%	7.8%	1142
22	2.9%	8.6%	0.0%	2.2%	4.5%	6.3%	6.3%	926
23	1.4%	6.2%	5.6%	2.0%	2.5%	4.6%	4.5%	662
24	1.4%	4.8%	8.3%	0.9%	2.5%	3.1%	3.3%	484
25	0.0%	1.6%	0.0%	0.2%	0.4%	0.9%	1.0%	143
26	0.0%	2.0%	0.0%	0.6%	0.7%	1.5%	1.4%	209
27	0.0%	1.7%	0.0%	0.3%	0.7%	1.0%	1.1%	164
28	0.0%	0.2%	0.0%	0.0%	0.1%	0.1%	0.1%	21
29	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
30	0.0%	2.6%	0.0%	0.3%	0.7%	1.1%	1.4%	204
	0.5%	28.6%	0.2%	8.5%	14.1%	48.1%	100.0%	14693
Mean	16.49	19.45	17.22	16.20	17.33	18.40	18.35	
SD	3.03	3.84	3.72	3.43	3.64	3.62	3.79	
Count*	69	4196	36	1255	2067	7070	14693	

* Number of examinations given to examinees

Table 24
Dental Admission Test
Organic Chemistry by Ethnicity
2023

Score	American Indian	Asian	Native Hawaiian	Black	Multi	White	Total	Count
1	0.0%	0.0%	0.0%	0.2%	0.1%	0.1%	0.1%	14
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	2
5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
7	1.4%	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	9
8	0.0%	0.1%	2.8%	0.2%	0.3%	0.1%	0.1%	20
9	1.4%	0.3%	0.0%	1.2%	0.6%	0.3%	0.4%	63
10	2.9%	0.5%	0.0%	2.4%	1.6%	0.6%	0.9%	129
11	1.4%	1.1%	2.8%	3.0%	1.5%	1.0%	1.3%	189
12	8.7%	2.6%	2.8%	7.2%	4.6%	3.4%	3.7%	545
13	7.2%	3.5%	5.6%	8.0%	6.2%	3.7%	4.4%	649
14	5.8%	4.9%	13.9%	9.9%	7.3%	6.2%	6.3%	927
15	18.8%	7.8%	16.7%	14.0%	12.4%	9.7%	10.0%	1467
16	8.7%	6.9%	2.8%	10.4%	8.2%	7.1%	7.5%	1104
17	11.6%	8.9%	11.1%	9.3%	10.4%	10.5%	10.0%	1463
18	11.6%	11.4%	13.9%	10.9%	11.1%	11.9%	11.6%	1699
19	2.9%	8.4%	5.6%	6.5%	8.4%	9.0%	8.5%	1249
20	8.7%	12.0%	11.1%	6.8%	8.8%	11.3%	10.8%	1582
21	1.4%	8.4%	5.6%	4.0%	5.9%	7.2%	7.0%	1033
22	2.9%	7.4%	0.0%	1.8%	4.7%	6.0%	5.8%	859
23	1.4%	3.3%	2.8%	1.0%	1.8%	2.2%	2.4%	349
24	0.0%	3.6%	2.8%	0.5%	1.8%	3.1%	2.8%	414
25	1.4%	2.5%	0.0%	0.7%	1.0%	1.6%	1.7%	246
26	1.4%	2.5%	0.0%	0.7%	1.4%	2.2%	2.0%	297
27	0.0%	1.6%	0.0%	0.2%	0.8%	1.2%	1.1%	168
28	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
29	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
30	0.0%	2.1%	0.0%	0.9%	0.8%	1.4%	1.5%	216
	0.5%	28.6%	0.2%	8.5%	14.1%	48.1%	100.0%	14693
Mean	16.06	18.87	16.61	16.18	17.26	18.27	18.11	
SD	3.59	4.00	3.40	3.64	3.84	3.86	3.95	
Count*	69	4196	36	1255	2067	7070	14693	

* Number of examinations given to examinees

Table 25
Dental Admission Test
Survey of the Natural Sciences by Ethnicity
2023

Score	American Indian	Asian	Native Hawaiian	Black	Multi	White	Total	Count
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
10	0.0%	0.0%	0.0%	0.5%	0.2%	0.1%	0.1%	16
11	1.4%	0.3%	2.8%	1.9%	1.5%	0.3%	0.6%	90
12	1.4%	1.2%	5.6%	5.7%	2.8%	1.5%	2.0%	287
13	10.1%	2.3%	5.6%	9.5%	5.7%	3.1%	3.8%	561
14	17.4%	4.2%	5.6%	9.5%	7.2%	5.3%	5.7%	833
15	15.9%	7.0%	19.4%	12.4%	10.9%	8.4%	8.8%	1289
16	10.1%	7.5%	5.6%	13.5%	11.0%	10.1%	9.8%	1435
17	11.6%	9.8%	19.4%	14.0%	13.7%	12.5%	12.0%	1768
18	5.8%	11.3%	5.6%	10.9%	10.7%	11.9%	11.5%	1683
19	11.6%	11.8%	11.1%	7.6%	10.8%	11.8%	11.3%	1658
20	11.6%	11.4%	8.3%	5.3%	8.6%	10.6%	10.1%	1485
21	0.0%	10.0%	2.8%	3.9%	6.2%	8.1%	8.0%	1173
22	0.0%	7.5%	5.6%	2.2%	4.8%	6.0%	5.9%	868
23	1.4%	6.2%	2.8%	1.4%	2.4%	4.4%	4.4%	640
24	1.4%	4.0%	0.0%	1.0%	1.2%	2.5%	2.6%	384
25	0.0%	1.8%	0.0%	0.2%	0.7%	1.3%	1.3%	187
26	0.0%	1.3%	0.0%	0.3%	0.5%	0.9%	0.9%	131
27	0.0%	1.0%	0.0%	0.2%	0.3%	0.6%	0.6%	95
28	0.0%	0.7%	0.0%	0.1%	0.3%	0.3%	0.4%	60
29	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4
30	0.0%	0.5%	0.0%	0.0%	0.2%	0.2%	0.3%	44
	0.5%	28.6%	0.2%	8.5%	14.1%	48.1%	100.0%	14693
Mean	16.32	19.13	16.81	16.43	17.47	18.40	18.30	
SD	2.69	3.37	2.98	2.95	3.22	3.18	3.31	
Count*	69	4196	36	1255	2067	7070	14693	

* Number of examinations given to examinees

Table 26
Dental Admission Test
Perceptual Ability by Ethnicity
2023

Score	American Indian	Asian	Native Hawaiian	Black	Multi	White	Total	Count
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
9	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	2
10	0.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.1%	9
11	0.0%	0.2%	0.0%	1.0%	0.1%	0.1%	0.2%	29
12	0.0%	0.4%	0.0%	2.8%	1.2%	0.4%	0.7%	103
13	5.8%	1.4%	2.8%	7.8%	2.2%	1.5%	2.1%	315
14	11.6%	2.9%	5.6%	9.6%	3.8%	2.7%	3.6%	525
15	4.3%	4.2%	2.8%	12.8%	7.5%	4.9%	5.7%	842
16	15.9%	7.6%	11.1%	15.1%	10.6%	7.8%	8.8%	1297
17	11.6%	9.8%	8.3%	14.6%	12.6%	10.1%	10.7%	1577
18	11.6%	13.9%	11.1%	15.4%	16.1%	15.7%	15.2%	2228
19	8.7%	14.0%	16.7%	9.6%	13.9%	15.7%	14.4%	2120
20	8.7%	12.5%	22.2%	6.1%	10.6%	12.7%	11.8%	1733
21	11.6%	12.5%	8.3%	3.1%	9.3%	11.6%	10.8%	1590
22	4.3%	8.0%	11.1%	0.8%	5.1%	7.1%	6.5%	955
23	2.9%	5.9%	0.0%	0.6%	4.0%	5.2%	4.8%	704
24	1.4%	2.8%	0.0%	0.2%	1.2%	2.0%	2.0%	288
25	1.4%	2.4%	0.0%	0.1%	1.0%	1.9%	1.7%	256
26	0.0%	0.7%	0.0%	0.0%	0.4%	0.4%	0.5%	67
27	0.0%	0.3%	0.0%	0.0%	0.1%	0.1%	0.1%	20
28	0.0%	0.3%	0.0%	0.0%	0.1%	0.1%	0.1%	22
29	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
30	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.1%	9
	0.5%	28.6%	0.2%	8.5%	14.1%	48.1%	100.0%	14693
Mean	17.80	19.22	18.56	16.54	18.33	18.98	18.74	
SD	2.94	2.87	2.41	2.47	2.76	2.68	2.83	
Count*	69	4196	36	1255	2067	7070	14693	

* Number of examinations given to examinees

Table 27
Dental Admission Test
Academic Average by Ethnicity
2023

Score	American Indian	Asian	Native Hawaiian	Black	Multi	White	Total	Count
1	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
3	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
4	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
5	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1
7	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2
8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0
9	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	4
10	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	4
11	0.0%	0.0%	0.0%	0.3%	0.2%	0.1%	0.1%	16
12	0.0%	0.3%	0.0%	2.2%	1.7%	0.5%	0.8%	111
13	2.9%	1.4%	2.8%	6.9%	3.7%	1.3%	2.1%	315
14	13.0%	2.4%	5.6%	10.9%	6.1%	3.1%	4.0%	593
15	10.1%	4.6%	19.4%	12.8%	9.6%	6.0%	6.7%	990
16	20.3%	7.3%	16.7%	14.9%	12.3%	9.3%	9.7%	1429
17	15.9%	9.6%	11.1%	14.6%	13.6%	12.1%	11.8%	1741
18	4.3%	11.8%	8.3%	13.5%	14.3%	14.0%	13.3%	1957
19	10.1%	12.8%	13.9%	10.4%	10.5%	13.9%	12.8%	1877
20	11.6%	12.4%	2.8%	5.4%	10.4%	12.4%	11.5%	1688
21	8.7%	12.0%	13.9%	3.1%	6.8%	9.6%	9.4%	1375
22	0.0%	8.6%	2.8%	2.0%	3.7%	6.5%	6.3%	922
23	1.4%	6.5%	2.8%	1.0%	2.6%	4.7%	4.6%	673
24	0.0%	4.2%	0.0%	0.7%	1.5%	3.0%	2.9%	431
25	0.0%	2.7%	0.0%	0.6%	1.1%	1.5%	1.7%	250
26	1.4%	1.8%	0.0%	0.2%	1.0%	1.2%	1.2%	181
27	0.0%	1.0%	0.0%	0.1%	0.2%	0.5%	0.5%	80
28	0.0%	0.4%	0.0%	0.0%	0.0%	0.2%	0.2%	35
29	0.0%	0.2%	0.0%	0.0%	0.1%	0.1%	0.1%	17
30	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1
	0.5%	28.6%	0.2%	8.5%	14.1%	48.1%	100.0%	14693
Mean	17.25	19.58	17.47	16.77	17.84	18.91	18.75	
SD	2.62	3.06	2.58	2.62	2.96	2.88	3.03	
Count*	69	4196	36	1255	2067	7070	14693	

* Number of examinations given to examinees

Table 28
Dental Admission Test
DAT scores by Examinees of Hispanic Origin
2023

Score	QRT	RCT	BIO	GCH	OCH	SNS	PAT	AA
1	0.00%	0.00%	0.40%	0.70%	0.70%	0.40%	0.00%	0.00%
2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
3	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
5	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6	0.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7	0.00%	0.00%	0.40%	0.40%	0.40%	0.00%	0.00%	0.40%
8	0.00%	0.00%	0.00%	0.00%	0.40%	0.00%	0.00%	0.00%
9	1.10%	0.40%	0.40%	0.70%	1.40%	0.40%	0.00%	0.00%
10	1.40%	0.00%	0.70%	0.70%	1.80%	0.00%	0.40%	0.40%
11	2.50%	1.40%	1.40%	4.30%	2.20%	1.80%	0.00%	1.10%
12	5.40%	1.40%	2.90%	3.60%	6.90%	5.80%	1.10%	2.90%
13	9.40%	1.40%	7.20%	9.00%	4.00%	6.90%	3.60%	6.50%
14	11.90%	2.50%	8.70%	7.90%	7.60%	6.90%	6.50%	6.10%
15	10.50%	6.90%	10.80%	13.00%	14.80%	15.20%	8.30%	13.70%
16	18.10%	11.90%	11.20%	14.40%	9.70%	10.50%	12.60%	14.40%
17	12.60%	12.60%	13.40%	9.70%	10.10%	14.10%	11.20%	11.90%
18	9.00%	13.40%	10.50%	7.60%	7.90%	10.10%	18.40%	15.50%
19	7.90%	11.90%	10.50%	10.50%	9.00%	9.40%	13.70%	10.80%
20	4.00%	6.50%	8.30%	6.10%	8.30%	7.60%	7.90%	6.50%
21	2.20%	10.50%	2.90%	2.90%	6.50%	4.00%	9.00%	5.10%
22	1.10%	8.70%	2.90%	2.50%	5.40%	3.60%	4.70%	1.10%
23	1.10%	2.90%	3.20%	2.90%	0.40%	1.40%	1.10%	1.80%
24	0.00%	0.70%	2.20%	0.70%	0.40%	1.40%	0.40%	1.10%
25	0.00%	2.90%	1.10%	0.40%	0.00%	0.40%	0.70%	0.00%
26	0.40%	1.80%	0.40%	0.00%	1.40%	0.00%	0.00%	0.40%
27	0.40%	1.40%	0.40%	1.10%	0.40%	0.40%	0.40%	0.40%
28	0.40%	0.70%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
29	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
30	0.40%	0.00%	0.40%	0.70%	0.40%	0.00%	0.00%	0.00%
Mean	15.96	18.68	17.09	16.46	16.62	16.74	17.77	16.94
SD	3.11	3.35	3.50	3.76	3.84	3.19	2.64	2.84
Count*	277	277	277	277	277	277	277	277

* Number of examinations given to examinees

Table 29
Correlations among DAT Disciplines (N=15,402)
2023

	BIO	GEN	ORG	QRT	RCT	PAT	SNS
BIO							
GEN	0.75						
ORG	0.74	0.76					
QRT	0.61	0.67	0.60				
RCT	0.47	0.44	0.39	0.53			
PAT	0.57	0.60	0.59	0.61	0.39		
SNS	0.91	0.90	0.90	0.68	0.47	0.64	
AVG	0.86	0.88	0.86	0.83	0.67	0.67	0.94

BIO=Biology; GEN=General Chemistry; ORG=Organic Chemistry; QRT=Quantitative Reasoning Test; RCT=Reading Comprehension Test; PAT= Perceptual Ability Test; SNS=Survey of the Natural Sciences; AVG=Academic Average.

Figure 1
Survey of the Natural Sciences
Biology Content Specifications
40 items

I. Cell and Molecular Biology

- A. Cell metabolism (including photosynthesis/enzymology)
- B. Cellular Processes
- C. Thermodynamics
- D. Mitosis / Meiosis
- E. Cell structure and function
- F. Experimental cell biology
- G. Biomolecules
- H. Integrated relationships

II. Diversity of Life

- A. Viruses
- B. Archaeobacteria
- C. Eubacteria
- D. Fungi
- E. Protista
- F. Plantae
- G. Animalia
- H. Integrated relationships

III. Structure and Function of Systems

- A. Integumentary
- B. Skeletal
- C. Muscular
- D. Circulatory
- E. Lymphatic/immune
- F. Digestive
- G. Respiratory
- H. Urinary
- I. Nervous/Sensory
- J. Endocrine
- K. Reproductive
- L. Integrated relationships

IV. Genetics

- A. Molecular genetics
- B. Human genetics
- C. Classical genetics
- D. Chromosomal genetics
- E. Genetic technology
- F. Developmental mechanisms
- G. Genomics
- H. Gene expression
- I. Epigenetics
- J. Integrated relationships

V. Evolution and Ecology

- A. Natural selection
- B. Population genetics/speciation
- C. Animal behavior
- D. Ecology (population, community, and ecosystem ecology)
- E. Integrated relationships

Figure 2
Survey of the Natural Sciences
General Chemistry Content Specifications
30 items

- I. Stoichiometry and General Concepts**
 - A. Percent composition
 - B. Empirical formulae
 - C. Balancing equations
 - D. Moles and molecular formulas
 - E. Molar mass
 - F. Density
 - G. Calculations from balanced equations
- II. Gases**
 - A. Kinetic molecular theory of gases
 - B. Dalton's gas law
 - C. Boyle's gas law
 - D. Charles's gas law
 - E. Ideal gas law
- III. Liquids and Solids**
 - A. Intermolecular forces
 - B. Phase changes
 - C. Vapor pressure
 - D. Structures
 - E. Polarity
 - F. Properties
- IV. Solutions**
 - A. Polarity
 - B. Properties
 - 1. Colligative
 - 2. Non-colligative
 - C. Forces
 - D. Concentration calculations
- V. Acids and Bases**
 - A. pH
 - B. Strength
 - C. Brønsted-Lowry reactions
 - D. Calculations
- VI. Chemical Equilibria**
 - A. Molecular
 - B. Acid/base
 - C. Precipitation
 - D. Calculations
 - E. Le Chatelier's principle
- VII. Thermodynamics and Thermochemistry**
 - A. Laws of thermodynamics
 - B. Hess's law
 - C. Spontaneity
 - D. Enthalpies and entropies
- VIII. Chemical Kinetics**
 - A. Rate Laws
 - B. Activation Energy
 - C. Half-life
- IX. Oxidation-Reduction Reactions**
 - A. Balancing equations
 - B. Determination of oxidation numbers
 - C. Electrochemical calculations
 - D. Electrochemical concepts and terminology
- X. Atomic and Molecular Structure**
 - A. Electron configuration
 - B. Orbital types
 - C. Lewis-Dot diagrams
 - D. Atomic theory
 - E. Quantum theory
 - F. Molecular geometry
 - G. Bond types
 - H. Sub-atomic particles
- XI. Periodic Properties**
 - A. Representative elements
 - B. Transition elements
 - C. Periodic trends
 - D. Descriptive chemistry
- XII. Nuclear Reactions**
 - A. Balancing equations
 - B. Binding energy
 - C. Decay processes
 - D. Particles
 - E. Terminology
- XIII. Laboratory**
 - A. Basic Techniques
 - B. Equipment
 - C. Error analysis
 - D. Safety
 - E. Data analysis
- E. Heat transfer**

Figure 3
Survey of the Natural Sciences
Organic Chemistry Content Specifications
30 items

I. Mechanisms: Energetics and Structure

- A. Elimination
- B. Addition
- C. Free radical
- D. Substitution mechanisms
- E. Other

II. Chemical and Physical Properties of Molecules

- A. Spectroscopy
 - 1. ^1H NMR
 - 2. ^{13}C NMR
 - 3. Infrared
 - 4. Multi-spectra
- B. Structure
 - 1. Polarity
 - 2. Intermolecular forces (solubility, melting/boiling point, etc.)
- C. Laboratory theory and techniques (i.e. TLC, separations, etc.)

III. Stereochemistry (Structure Evaluation)

- A. Chirality
- B. Isomer relationships
- C. Conformations

IV. Nomenclature

- A. IUPAC rules
- B. Functional groups in molecules

V. Individual Reactions of the Major Functional Groups and Combinations of Reactions to Synthesize Compounds

- A. Alkene/Alkyne
 - 1. General
 - 2. One-step
 - 3. Multi-step
- B. Aromatic
 - 1. General
 - 2. One-step
 - 3. Multi-step
- C. Substitution/Elimination
 - 1. General
 - 2. One-step
 - 3. Multi-step
- D. Aldehyde/Ketone
 - 1. General
 - 2. One-step
 - 3. Multi-step
- E. Carboxylic acids and derivatives
 - 1. General
 - 2. One-step
 - 3. Multi-step
- F. Other
 - 1. General
 - 2. One-step
 - 3. Multi-step

VI. Acid-Base Chemistry

- A. Ranking Acidity/ basicity
 - 1. Structure analysis
 - 2. pH/pK_a data analysis
- B. Prediction of products and equilibria

VII. Aromatics and Bonding

- A. Concept of aromaticity
- B. Resonance
- C. Atomic/molecular orbitals
- D. Hybridization
- E. Bond angles/lengths

Figure 4
Quantitative Reasoning
Content Specifications
40 items

I. Mathematics Problems

A. Algebra

1. Equations and expressions
2. Inequalities
3. Exponential notation
4. Absolute value
5. Ratios and proportions
6. Graphical analysis

B. Data Analysis, Interpretation, and Sufficiency

C. Quantitative Comparison

D. Probability and Statistics

II. Applied Mathematics (Word) Problems

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