**CONCEPTS AND ITEM ANALYSIS**

**University of San Francisco**
Office of Assessment and Accreditation Support

**Qs 1 – 5.** The first five questions tested students’ ability to identify basic statistical terms: mean (Q1), median (Q2), mode (Q3), standard deviation (Q4), and correlation coefficient (Q5).

**Q1.** 99% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (100%) and Arts & Humanities, Social Sciences, and School of Nursing & Health Professions students tied for the lowest proportion of correct answers (98%).

**Q2.** 98% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (100%) and Arts & Humanities students earned the lowest proportion of correct answers (95%).
Q3. 97% of students correctly answered this question. Arts & Humanities and School of Nursing & Health Professions students tied for the highest proportion of correct answers (100%) and School of Management students earned the lowest proportion of correct answers (96%).

![Bar chart showing the percentage of correct answers across different departments. Arts & Humanities (n = 51) had 100%, Math & Sciences (n = 50) had 98%, Social Sciences (n = 60) had 97%, SOM (n = 94) had 96%, SONHP (n = 43) had 100%, and USF (n = 298) had 97%.

Q4. 92% of students correctly answered this question. Math & Sciences and School of Nursing & Health Professions students tied for the highest proportion of correct answers (98%) and Arts & Humanities students earned the lowest proportion of correct answers (78%).

![Bar chart showing the percentage of correct answers across different departments. Arts & Humanities (n = 51) had 78%, Math & Sciences (n = 50) had 98%, Social Sciences (n = 60) had 95%, SOM (n = 94) had 90%, SONHP (n = 43) had 98%, and USF (n = 298) had 92%.]
Q5. 92% of students correctly answered this question. Math & Sciences and School of Nursing & Health Professions students tied for the highest proportion of correct answers (98%) and Arts & Humanities students earned the lowest proportion of correct answers (78%).

![Bar chart showing the percentage of correct answers for each department.](chart.png)
Qs 6 - 9. The next four items tested students’ understanding of basic statistics (mean, frequency distribution), apply this knowledge to a histogram, and draw accurate conclusions.

Q6. 93% of students correctly answered this question. Math & Sciences students received the highest proportion of correct answers (100%) and School of Nursing and Health Professions students received the lowest proportion of correct answers (88%).

Q7. 96% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (98%) and Arts & Humanities students earned the lowest proportion of correct answers (92%).
Q8. 43% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (52%) and Arts & Humanities students earned the lowest proportion of correct answers (35%).

Q9. 53% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (58%) and Arts & Humanities students received the lowest proportion of correct answers (47%).
Qs 10 - 11. This question tested students’ ability to identify functional growth as it applies to environmental atmospheric CO$_2$ levels (depicted as a figure) and draw accurate conclusions based on this figure.

Q10. 95% of students correctly answered this question. The highest proportion of correct answers were made by Math & Sciences students (100%) and the lowest proportion of correct answers were made by Arts & Humanities students (88%).

Q11. 78% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (92%) and Arts & Humanities students earned the lowest proportion of correct answers (69%).
Qs 12 – 13. These two questions tested students’ ability to identify components of a table that outline sexual health data and explain the interrelations from the data depicted in that table.

Q12. 94% of students correctly answered this question. Social Sciences and School of Nursing & Health Professions students tied for the highest proportion of correct answers (98%) and Arts & Humanities and Math & Sciences tied for the lowest proportion of correct answers (92%).

Q13. 93% of students correctly answered this question. School of Nursing & Health Professions students earned the highest proportion of correct answers (98%) and School of Management students earned the lowest proportion of correct answers (88%).
Q14 - 15. These two questions presented students with a pie chart that outlined a couple’s budget, and tested students’ ability to make judgements and draw conclusions to a specified problem based on the information communicated in the pie chart.

Q14. 95% of students correctly answered this question. Math & Sciences, Social Sciences, and School of Nursing & Health Professions students tied for the highest proportion of correct answers (98%) and Arts & Humanities students earned the lowest proportion of correct answers (82%).

Q15. 58% of students correctly answered this question. Math & Sciences students earned the highest proportion of correct answers (62%) and School of Nursing & Health Professions students earned the lowest proportion of correct answers (51%).