2021-2022 Madical Math

Event Summary

Medical Math provides members with the opportunity to gain knowledge and skills required to identify, solve, and apply mathematical principles. This competitive event consists of a written test with tie-breaker questions. This event aims to inspire members to learn about the integration of mathematics in health care, including temperature, weights, and measures used in the health community.

Dress Code Competitors must be in official HOSA uniform or in proper business attire. Bonus points will be awarded for proper dress.

General Rules

1.	Secondary and Postsecondary / Collegiate divisions are eligible to compete in this event.
2.	All competitors shall report to the site of the event at the time designated for competition. At ILC, competitor's photo ID must be presented prior to ALL competition rounds.
3.	Academic Competition Events will be hosted on **March. 19. 2022 at 여의도 전경련회관, Conference Hall 2F , AM 10:00**

Process

4. Official References:

- Simmers, L., Simmers-Nartker, Simmers-Kobelak. DHO: Health Science. Cengage Learning, Latest edition.
- Olsen, et al, Medical Dosage Calculations. Pearson Latest edition.
- Craig, Gloria P., Clinical Calculations Made Easy. Wolters Kluwer, Latest edition.
- Helms, Joel R., Mathematics for Health Sciences: A Comprehensive Approach. Cengage Learning. Latest edition.

5. Written Test:

The written test will consist of 50 fill-in-the-blank items in a maximum of 90 minutes.

6. **Tie Break Questions:**

A series of ten (10) complex, multi-step tie breaking questions will be administered with the original test. In case of a tie, successive tie-breaker questions will be used until a winner is determined. In the tiebreaker, correct spelling is required for an item to be considered correct.

7. **The test plan and resources for Medical Math:**

- Mathematical essentials 5%
- Measurement and conversion problems 20%
- Drug dosages and intravenous solutions 35%
- Dilutions, solutions and concentrations 25%
- Interpreting medical information 15%

  Charts, graphs, tables

  Basic statistics: mean, median, mode, standard deviation

  Calculating body surface