Biomedical Equipment Technician

Event Category: Health Science

Eligible Divisions: Secondary & Postsecondary/ Collegiate	**Round One:** In Person Testing Written 50 Q test (60 minutes)	**Digital Upload:** NO
Solo Event: 1 competitor		

This event will take place as a written test at SLC (Thursday, March 18th)

Refer to the Conference Agenda for assigned testing time

Event Summary

The Biomedical Equipment Technician event aims to inspire members to learn more about Biomedical Equipment Technicians (BMETs) who ensure the functionality and safety of medical, imaging, and dental devices, including patient monitors, dental handpieces, surgical robots, ventilators, vacuum pumps, and imaging systems. This competitive event consists of a written test with a tiebreaker essay question. Through this event, competitors will learn how BMETs troubleshoot, maintain equipment, and ensure compliance within healthcare safety standards. BMETs combine technical expertise in electronics and mechanics with problem-solving skills to ensure medical devices operate reliably. They also communicate effectively with healthcare staff to provide training and support, contributing directly to patient care quality.

General Event Information

General Rules	Competitors must be familiar with and adhere to the General Rules and Regulations.
Dress Code	HOSA's Official Uniform or HOSA Business Dress. Appendix D
Competitors Must Provide	• Photo ID • Two #2 lead pencils (not mechanical) with an eraser • Neon colored foam earplugs, NOT earbuds, for noise control (optional) HOSA Conference Staff will provide equipment and supplies listed in Appendix I.

Official References	The two online courses below are used in the development of the test questions:
	• There is a single sign-up/login to access both courses: https://hosa-cbet.talentlms.com/plus/
	  ○ **AAMI BMET 101** – AAMI Training
	  ○ **Medical Equipment Technician (MET) 100 Series HOSA** - College of Biomedical Equipment Training
	• Completing these courses will enable HOSA members to sit for the AAMI Certified Associate of Biomedical Technology (CABT) Certification at a reduced HOSA student rate.
	• Completion of these courses also provides a quality pre-apprenticeship pathway into the national registered Apprenticeship programs of both AAMI and American Healthcare Apprenticeship programs.
	• **Additional Optional Resources for both competitors and HOSA advisors:**
	  ○ ACI AAMI Credentials Institute Certification Candidate Handbook - Provides information about AAMI HTM certifications
	  ○ HTM in a Box - Promoting the Healthcare Technology Management Field
	• All information about these resources and opportunities for HOSA members can be found on the Landing Page.

The expectation is that competitors read and are aware of all the content within these guidelines and associated links. Successful competitors will study all links for detailed information.

ROUND ONE- Test

Test Instructions	All competitors will be given a test and test answer sheet. The written test will consist of 50 multiple choice questions in a maximum of 60 minutes. See test instructions here. An essay tiebreaker question will be administered with the original test. Essay tiebreakers will be completed on the back of the test answer sheet.
Time Remaining Announcements	There will be NO verbal announcements for time remaining during SLC testing. All SLC testing will be completed in the Testing Center, and competitors are responsible for monitoring their own time.
Written Test Plan	The test plan for Biomedical Equipment Technician is: ● Anatomy & Physiology - 10% ● Medical Devices as Related to Public Safety - 22% ● Safety in Healthcare - 16% ● Fundamentals in Electricity and Electronics - 14% ● Reasoning – 24% ● Healthcare IT - 14%
Sample Test Questions	1. In medical terminology, what does the term "proximal" refer to? (MET 100) A. Toward the front of the body B. Toward the back of the body **C. Closer to the point of attachment** D. Away from the point of attachment 2. What medical devices are defined as monitoring the electrical activity of the heart to detect abnormalities and rate? (MET 100) **A. ECG** B. Blood pressure C. Diopter D. ETCO2 3. What is the primary purpose of biohazard and infection control procedures? (MET 100) A. Enhance workplace aesthetics B. Ensure patient confidentiality C. The precautions of medical equipment **D. Maintain a safe working environment**

Final Scoring

In the event of a tie, the essay will be judged to break the tie.

International Leadership Conference (ILC) qualifiers

Go to https://hosa.org/guidelines/ for specifics about this competitive event at ILC.

June 22-25, 2027, Pennsylvania Convention Center in Philadelphia, Pennsylvania

High School/Post-Secondary/Collegiate Seniors

Don't wait until you graduate to join the HOSA alumni network! Graduating from high school or completing your postsecondary/collegiate program does not mean your HOSA journey has to end. As a HOSA member, you are eligible to become a HOSA Lifetime Alumni Member- a free and valuable opportunity to remain connected, give back, and help to shape the future of the organization. Learn more and sign up at hosa.org/alumni.

SC HOSA Scholarship

Application: https://www.schosa.org/students/scholarships/
Application Window Opens: December 1, 2026
Application Deadline: February 1, 2027

National HOSA Scholarship

Scholarship program has funding available for HOSA members who have an interest in various health careers! The application process begins January 1, 2027, and can be found here: https://hosa.org/scholarships/.

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