

BACE

Biotechnology
Aptitude and
Competency
Exam

AY 25-26

CBT

EXAM SPECIFICATIONS FOR COMPUTER-BASED TESTING

The **Biotechnology Aptitude and Competency Exam (BACE)** consists of two portions: a practical portion and a knowledge portion. Candidates take both portions, which cover eight categories, in a single session. To pass the BACE, candidates must score 80% or higher. Candidates are allowed up to three attempts per academic year, with a mandatory 20-day waiting period between attempts.

The Computer-Based Testing option must be administered at an Exam Site with live proctors and is conducted in a computer lab or standard classroom. **The exam is closed book with a duration of 4 hours.**

The following descriptions for each portion include the total questions, categories covered, questions per category, points per category, and total points.

Category	Questions	Points
BACE Knowledge Portion		
Technical Skills & Applications	22	33.25
Safety & Workplace Culture	15	21
Biochemistry & Molecular Biology	15	17.5
Regulation & Quality	12	15.75
BACE Practical Portion		
Biotechnology Skills	19	40.25
Applied Mathematics	13	21
Standard Equipment	10	14
Experimental Design & Data Analysis	10	12.25
Total	116	175

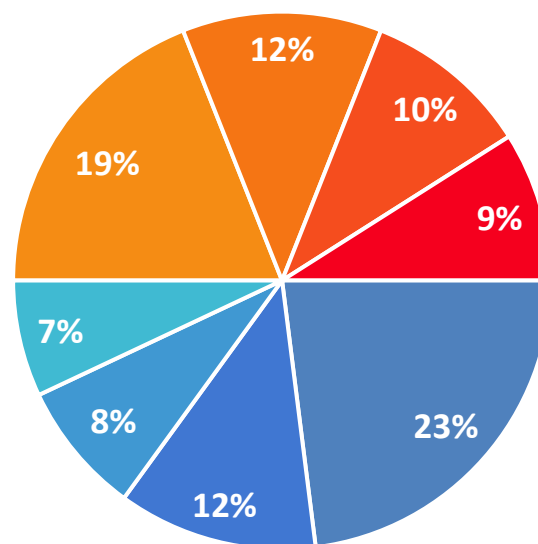
The following are suggested study references:

- Brown, A. (2018). *Biotechnology: A Laboratory Skills Course* (2nd ed.). Bio-Rad Laboratories, Inc.
- Pruitt, H. (2024). [Regulatory Compliance and Quality Systems Overview](#). Biotility, University of Florida.

Alternate References to Biotechnology: A Laboratory Skills Course

- Daugherty, E. L. (2017). *Biotechnology: Science for the New Millennium* (2nd ed.). Paradigm Publishing.
- Seidman, L. A. (2021). *Basic Laboratory Methods for Biotechnology* (3rd ed.). CRC Press.

Distribution of Points per Category



- Technical Skills & Applications
- Safety & Workplace Culture
- Biochemistry & Molecular Biology
- Regulation & Quality
- Biotechnology Skills
- Applied Mathematics
- Standard Equipment
- Experimental Design & Data Analysis