

BOĞAZIÇI UNIVERSITY INSTITUTE OF BIOMEDICAL ENGINEERING
RESEARCH ASSISTANTSHIP WRITTEN EXAM
(as part of the overall assessment)

Date & Time: Friday, June 13, 2025 – 10:00 AM sharp.

Place: Institute of Biomedical Engineering
Boğaziçi University, Kandilli Campus
Rooms AZ18–19
Rasathane Cd., No:104, Kandilli, Üsküdar, İstanbul

Exam Guidelines:

Duration: 3 hours (180 minutes)

Format: 12 questions total

→ You must answer **8 questions maximum, all in English.**

→ **4 questions are mandatory** from the *core group*

→ Remaining **4 questions** can be chosen from either the *core* or *optional* sections

⚠ Important:

- Do **not** answer more than 8 questions. Only the first 8 (in question number order) will be graded.
- If fewer than 4 core questions are answered, optional ones will **not** count toward your core requirement.
- You may answer more than **4 core** questions. If you do, those additional core questions will count toward the optional portion. However, the total number of answers **must not exceed 8.**

Scoring: Each question is worth 12.5 points

Rules During the Exam:

- Closed book, no notes, **no internet access, no calculators**
- All mobile phones must be turned off and placed in the designated box

Exam Content Overview:

This exam evaluates both foundational and advanced topics in Biomedical Engineering, with an emphasis on Biomedical Electronics.

Core Topics (expect mandatory questions from these):

- Basic Biology, Human Anatomy & Physiology
- Linear Systems & Algebra, Differential Equations
- Biomedical Instrumentation (including electronics, control systems, sensors)
- Biomedical Signal & Image Processing

Supporting Topics (may appear in optional questions):

- Basic Neuroscience
- Biophysics
- Biostatistics
- Programming