

29.05.2021

YILDIZ TECHNICAL UNIVERSITY

DEPARTMENT OF BIOMEDICAL ENGINEERING

BIOMEDICAL INSTRUMENTATION - MIDTERM II QUESTIONS -

1. **(10 points)** Define the blood pressure and explain why it is important for clinicians.
2. **(10 points)** Discuss how blood pressure is determined using oscilloscopic technique.
3. **(20 points)** Assume that you are working to develop an extravascular blood pressure measurement system. What would be the steps you followed during this process? Discuss.
4. **(10 points)** Which techniques are used to determine not instantaneous flow of blood?
5. **(10 points)** Explain the Fick technique.
6. **(10 points)** What is half-cell potential? How is it measured?
7. **(15 points)** What are the reactions that happen at the electrode/electrolyte interface? Explain.
8. **(15 points)** Discuss how fiber optics can be used in the blood pressure systems.