The purpose of this exam is to gauge your readiness to enter Upper-Division level theory by validating that you have the necessary Sophomore-level skills in music theory. While there are other aspects of Sophomore-level theory that this test does not cover, the most foundational of skills is tested here. This test consists of four questions; for the last question only, the musical example will be played for you during the exam. Answer all questions fully and to the best of your ability.

Question 1
Manipulate the following twelve-tone row to produce the desired transformations.

\[
\begin{array}{c}
\text{P-0} \\
\text{P-3} \\
\text{R-5} \\
\text{RI-8} \\
\text{R-10}
\end{array}
\]
Question 2
Set the given bass line in four voices, SATB-style, without figuration (non-harmonic tones). Include a detailed harmonic analysis of your work. You must include each of these chords only once.
- Augmented sixth
- Neapolitan
- diminished seventh
- secondary (applied) dominant seventh
- dominant ninth or thirteenth

![Bass Line](image)

Question 3
What is the name of the rhythmic technique being employed here?

![Rhythmic Technique](image)

Question 4
What is the name of the scale being used in the example below? Label and write out the scale using the staff provided.

![Scale](image)