I. Post-Tonal set analysis (50%)
Study the following musical excerpt and answer the following questions about pitch-class sets and their relationships within the passage.
1. Much of the pitch class material in this passage is based upon various transpositions and inversions of the trichord formed by the first three pitches in the flute part in measure 1 (A, Bb, and Eb). In the space below, label this trichord in its **normal form** using pitch class numbering (C = 0) and then its **prime form** (also with pitch class numbering).

Normal form _________________  Prime form: _________________

2. Determine the interval-class vector (interval content) for this trichord and list it below:

Interval vector of trichord :  < ____  ____   ____   ____   ____   ____ >

3. Locate and circle and label by number (1, 2, 3) in the score eight (8) more instances of this trichord set-class identified in Question 1, and list below each set in its normal form. Pitch-class sets can be found in the flute melody, in the piano texture, or shared between the flute and piano. Then compare the normal form of each of the eight trichord sets to the normal form of the original trichord set of Question 1 and list its specific relationship by transposition or by inversion (such as T⁹ of original trichord, or I⁵ of original trichord).

   Set 1  Normal form ___________  Relationship to original trichord ___________
   Set 2  Normal form ___________  Relationship to original trichord ___________
   Set 3  Normal form ___________  Relationship to original trichord ___________
   Set 4  Normal form ___________  Relationship to original trichord ___________
   Set 5  Normal form ___________  Relationship to original trichord ___________
   Set 6  Normal form ___________  Relationship to original trichord ___________
   Set 7  Normal form ___________  Relationship to original trichord ___________
   Set 8  Normal form ___________  Relationship to original trichord ___________

II. Writing and identifying pitch class collections (25%)

Name the following pitch class collections (scales and modes) specifically:

```
\[ \text{\texttt{G B D E F A C E}} \]
```

____________________________
Write the following ascending pitch collections on the staves below:

- Hexatonic scale beginning C#/D
- Octatonic scale beginning with D/Eb
- A Lydian
- Gb Mixolydian

III. Serial analysis (25%)
To aid in determining the serial row forms used in the following excerpt, you will construct the perimeter of a 12x12 row matrix.

1) First take the Prime row (Original row) presented melodically in the left hand (beginning with the Bb in the first measure’s left-hand part and ending with the E at the end of measure 2).
Use pitch class C#=1, etc.) write this prime row in the space below:

10   _____   _____   _____   _____   _____   _____   _____   _____   _____   _____   _____

2) Transpose each pitch class of this row up 2 semitones so that the row begins on “0.” Then write this prime form (beginning with “0”) as the top row of the row matrix chart below.

3) Complete the remainder of the perimeter of the row matrix chart (the two sides and bottom row) with the appropriate transformation of the row.

4) Label the outside of the matrix with row form labels and directional arrows pointing to how the rows should be read (vertically or horizontally, forward or backward).

5) With reference to the rows listed in the row matrix chart, provide an analysis of the 12-tone rows found in the musical excerpt above, bracketing the beginning and ending of each row form and labeling its type specifically (such as Ri4). The rows run separately for the left hand (bass clef) and right hand (treble clef)