

- I. Write out the truth tables for the five truth functional operators. (10 points)
- II. Translate the following statements into symbolic form using capital letters to represent affirmative English statements: (Exercises 6.1, I.). {3 points each}

There are 5 of them.

- III. Determine the truth values of the following symbolized statements. Let A , B and C be true and X , Y and Z be false. Circle your answer. {5 points each}

There are 3 of them.

- IV. Use truth tables to determine whether the following symbolized statements are tautologous, self-contradictory, or contingent. {3 pts each}

There are 4 of them.

- V. Use truth tables to determine whether the following pairs of symbolized statements are (1) logically equivalent, (2) contradictory, (3) consistent or (4) inconsistent. First determine whether the pairs of propositions are logically equivalent or contradictory; then, if these relations do not apply, determine whether they are consistent or inconsistent. {5 pts each}

There are 3 of them.

- VI. Translate the following arguments into symbolic form. Then determine whether each is valid or invalid by constructing a truth table for each. [Exercise 6.4, I]

There is one of them.

- VII. Use indirect [”short” or “abbreviated”] truth tables to determine whether the following argument is valid or invalid. [Exercise 6.5, I] {15 points}

There is one of them.