The Continuing Education Division at the Ozark Community College offers a total of 30 courses each semester. The courses offered are usually of two types: practical, such as woodworking, word processing, and car maintenance; and humanistic, such as history, music, and fine arts. To satisfy the demands of the community, at least 10 courses of each type must be offered each semester. The division estimates that the revenues of offering practical and humanistic courses are approximately $1500 and $1000 per course, respectively.

**Question1.** Construct a table that provides the basic information of the problem.

**Question2.** Define the Linear Programming (LP) Models in which the definition of the variables and the construction of the objective function and constraints of the model.

**Question3.** Use the Simplex Method to determine an optimal course offering for the college. Show that the worth per additional course is $1500, which is the same as the revenue per practical course. What does this result mean in terms of offering additional courses?

**Question4.** Show the graphical LP solution of this model.

**Question5.** Find the LP solution with Excel Solver.