PLEASE ANSWER FOUR (ONLY 4) OF THE FOLLOWING FIVE QUESTIONS IN YOUR BLUEBOOK

1. The 18th century French philosopher Condorcet showed that a non-transitive voting paradox might arise generating “cyclical voting” behavior. Explain the paradox.

2. In developing his Impossibility Theorem, Nobel Laureate Kenneth Arrow included the assumption that the presence or absence of an “irrelevant alternative” should not affect the electoral outcome. Explain the nature and significance of this condition.

3. For most commodities the “exclusion principle” is satisfied and there is “rivalry in consumption.” Present an example of a commodity that does not satisfy the exclusion principle but for which there is rivalry in consumption. Then present an example of a commodity that does not satisfy either condition. Finally, explain what is meant by a “public good.”

4. For most commodities efficiency requires that $\text{MRS}_a = \text{MRS}_b = \text{MRT}$ (i.e., the marginal rate of substitution of Albert must equal the marginal rate of substitution of Baker must equal the marginal rate of transformation). Public goods are an exception. Explain how and why this efficiency condition must be modified in the case of public goods. (Hint: a graph may help).

5. The graph shows the utility possibility frontier for two individuals, Albert and Baker. Which allocation of resources would be favored by philosopher John Rawls? Why? Which would be favored by philosopher Jeremy Bentham? Why?