

Study Subject Outline for Final Exam

- Solver/listener paradigm
- Socratic questioning
- Verbal reasoning
- Analogies
- Algorithms: Pseudo code language, Divide and conquer algorithms, and Recursive algorithms
- Heuristics: externalize, simplify, go to extreme, visualization, invariants, pigeonhole principle, special features, penultimate step, and symmetry
- Non-verbal reasoning, spatial reasoning
- Cryptarithmic problems
- Deductive and hypothetical reasoning, mathematical word problems
- Analysis of Trends and Patterns
- Interpersonal problem solving
- Problem solving in large:
 - Strategies,
 - Mental blocks and ways to overcome them,
 - Gathering information,
 - Problem definition techniques,
 - Solution generation techniques, Osborn's checklist
 - Decide course of action,
 - Kepner-Tregoe Approach: phases, their usage, tables
 - K.T. phases: Situation appraisal, problem analysis, decision analysis, potential problem analysis

For more details on the listed subjects refer to course slides.