

A 2,3
II
V: 14,15,16,17

LECTURE NOTES
SPECIAL TOPICS IN GAME THEORY

by
Sergiu Hart

Table of Contents

	<u>Page</u>
I. The Nash Cooperative Solution of Two Person Games*	I-1
1. Bargaining Problems - Fixed Threats	I-1
2. Variable Threats	I-3
References	I-24
II. Games in Extensive Form**	II-1
1. Extensive Form of an <u>n-Player</u> Game	II-1
2. Pure Strategies	II-3
3. Normal Form	II-5
4. Mixed Strategies	II-6
5. Equilibrium Point	II-7
6. Games with Perfect Information	II-8
7. Behavior Strategies	II-14
References	II-29
III. Stochastic Games**	III-1
1. Introduction	III-1
2. Strategies	III-2
3. Existence of a Value	III-3
4. Optimal Strategies	III-9
5. Examples	III-11
6. Discount Games	III-15
References	III-16
IV. Repeated Games**	IV-1
1. Introduction	IV-1
2. Definition of a Repeated Game and Strategies	IV-2
3. Equilibrium Points	IV-5
4. Further Reading	IV-25
5. Payoff in a Repeated Game	IV-25
References	IV-26

*Based on lectures given in February 1977. Written by Martin J. Osborne.

**Based on lectures given in Spring 1979. Written by Ruth J. Williams.