

TABLE OF CONTENTS

1.	CHOOSING A CLINICAL TEST	1
1.1	What Makes a Good Diagnostic Test	1
1.2	When Is a Probabilistic Approach Necessary?	2
2.	EVALUATION OF DIAGNOSTIC TESTS	2
2.1	Sources of Variation	2
2.2	Statistics of a Clinical Test	3
2.3	Populations and Probabilities: Two Parallel Interpretations	5
2.4	Statistics of a Disease in Epidemiology	6
2.5	A Procedure for Calculating Statistical Parameters	7
2.6	Predictive Values	9
3.	Multi-Disease and Multi-Test Analysis	11
3.1	Statistical Independence	11
3.2	Series and Parallel Interpretation of Multiple Tests	12
3.3	Notation	13
3.4	Calculation of Overall Sensitivity and Specificity	14
3.5	Predictive Values for Multi-Disease Situation .	17
3.6	Predictive Value of an Arbitrary Set of Test Results	20
4.	Medical Decision Analysis	21
4.1	Medical Decisions and Strategies	21
4.2	Costs, Benefits, and Weighting Coefficients .	23
4.3	Cost Benefit Analysis of Treatment: Prevalence Threshold	25
5.	Exercises	28
6.	Sample Exam.	31
7.	Answers to Exercises	33
8.	Answers to Sample Exam	39