## Contents

**Foreword** .................................................. xvii  
**Preface** .................................................... xix  
  About this Book ........................................ xx  
  Conventions Used ....................................... xxiii  

**Chapter 1: IBM DB2 9 Certification** .......................... 1  
  DB2 9 Certification Roles ............................... 1  
  The Certification Process .............................. 18  

**Chapter 2: Database Design** ................................. 39  
  Servers, Instances, and Databases ..................... 40  
  Creating a Non-partitioned DB2 Database .............. 40  
  Creating a Partitioned DB2 Database .................. 55  
  Buffer Pools .................................. 59  
  Table Spaces ..................................... 76  
  Expanding a Database’s Boundaries with Federated Systems .. 112  
  Practice Questions .................................. 126  
  Answers ............................................... 132  

**Chapter 3: Data Partitioning and Clustering** .............. 139  
  Parallelism .......................................... 140  
  Partitioned Databases—A Closer Look ................. 147  
  Partition Groups ..................................... 160  
  Partitioning Keys and Partitioning Maps ............. 165  
  Range Clustering and Range Partitioning ............. 173  
  Multidimensional Clustering .......................... 182  
  Combining Database Partitioning, Table Partitioning, and  
    Multidimensional Clustering ........................ 195  
  A Word About the Design Advisor .................... 196
### Chapter 6: Security

- Controlling Database Access: 490
- Authentication: 490
- Authorities and Privileges: 500
- Granting Authorities and Privileges: 527
- Authorities and Privileges Needed to Perform Common Tasks: 530
- Securing Data Using Encryption: 531
- Securing Data with Label-Based Access Control (LBAC): 538
- DB2’s Audit Facility: 557
- Practice Questions: 566
- Answers: 572

### Chapter 7: Connectivity and Networking

- Configuring Communications: 577
- DB2’s Directory Files: 581
- Cataloging Remote Servers and Databases: 585
- Configuring Communications to System z and System i Database Servers: 594
- DB2 Discovery: 598
- Fast Communications Manager (FCM) Communications: 602
- Troubleshooting Communications Errors: 604
- Practice Questions: 606
- Answers: 611

### Appendix A: DB2 9 for Linux, UNIX, and Windows Advanced Database Administration Exam (Exam 734) Objectives: 621

### Appendix B: Monitoring Buffer Pool Activity: 625

### Appendix C: Using Materialized Query Tables (MQTs): 639

### Appendix D: Joining in DB2.: 653

### Appendix E: Explain Tools: 683

### Appendix F: Sample Test: 699