

## MINDTREE \_DOTNET\_MCQ

Custom dotnet test. The Secure Evaluation Mode and Remote versions of this test will contain a minimum of 45 questions and will require a typical time of 54 minutes. The Secure Interview Mode and QwikChek versions will provide as many questions as the test taker can answer within an approximate 33 minute time limit.

Following is a description of each sub-topic on the test:

**Collections and Generics** measures knowledge of the use of the framework collection classes and the generic versions of these using C# 4.0.

**Performance and Security** determines understanding of the two key non-functional aspects of C# 4.0 code: predicting and analyzing the performance of a C# application and securing a C# application.

**Entity Framework** assesses knowledge of the ADO.NET Entity Framework's architecture, including schema definition language, Entity SQL, and the use of LINQ to Entities.

**ASP.NET MVC Framework** assesses understanding of ASP.NET MVC, which enables developers to build a Web application incorporating the classic model-view-controller design pattern.

**WCF Contracts** assesses experience with Windows Communication Foundation's support for the use of WCF Service Contracts and Contracts and how to effectively apply Contracts in a WCF application.

**Database Design** measures proficiency in fundamental, relational database concepts, including normalization and database design best practices in SQL Server 2008.

**Queries & Joins** evaluates the understanding of data selection queries, subqueries and joins in extracting data from SQL Server 2008 databases.

**Stored Procedures** tests knowledge of stored procedure concepts and types available in SQL Server 2008 and proficiency in designing and implementing a stored procedure. Also covers the testing and debugging of stored procedures.

**Keys, Constraints & Indexes** measures proficiency in relational database concepts, including primary keys, foreign keys, constraints, indexes, and referential integrity used in SQL Server 2008.

**Class Diagram: II** examines knowledge of the concepts of relationships between the classes in object-oriented design.

**Class Diagram: III** measures understanding of the concepts of classes and concepts of visibility, multiplicity, and navigation in object-oriented design.

**Encapsulation** demonstrates understanding of the encapsulation mechanism that is unique to object-oriented programming, specifically access control.

**Exceptions** tests knowledge and ability to apply error handling strategies in object-oriented programming.

**Object-Oriented Frameworks** assesses knowledge of well-designed class libraries and frameworks like reusability, abstraction and flexibility.

**Multi-Tier Applications** measures ability to understand and design object-oriented architectures separated into data, business logic and user interface layers.