

**Krishna's TB Metric Spaces | Pages 210 +|  
Code 1056 | 1st Edition | Concepts +  
Theorems/Derivations + Solved Numericals  
+ Practice Exercises | Text Book  
(Mathematics 43)**

*by*

**Carol Ann Gillespie**



**TEXT BOOK**

**Metric Spaces**



**DOWNLOAD E-BOOK**

## Synopsis

SYLLABUS- METRIC SPACES, Section A Definition of distance and metric spaces. Examples of Euclidean metric space, sequence spaces and function spaces. Open spheres. Open sets and their properties. Interior of a set and its properties. Closed set and its properties. Closure of a set and its properties. Boundary of a set. Dense set. (2 questions) Base and axioms of countability. Separable space. Subspace. Product space. Sequences and subsequences and their convergence in a metric space. Cauchy sequence. Complete metric space and its examples. Cantor's theorem. Baire's category theorem. (1 questions) Section B Definition and properties of a compact set. Compact sets in  $\mathbb{R}$ . Finite intersection property. Bolzano-Weierstrass property and its equivalence. Sequential compactness and total boundedness. (2 questions) Definition of continuous mapping in a metric space. Limit of a function in a metric space. Relationship between continuity and limit. Continuity in terms of open sets and closed sets. Continuity of constant and identity mappings. Continuity and compactness. Connectedness in a metric space. Interval as a connected subspace. (2 questions)

## Sort review

From the Publisher Carol Ann Gillespie, Ph.D., is a writer and educator. She taught world regional geography at Slippery Rock University in Pennsylvania and served as a Reader, Table Leader, Question Leader, and Item Writer for the College Board for AP Human Geography.--This text refers to the paperback edition. About the Author Carol Ann Gillespie, Ph.D., is a writer and educator. She taught world regional geography at Slippery Rock University in Pennsylvania and served as a Reader, Table Leader, Question Leader, and Item Writer for the College Board for AP Human Geography.--This text refers to the paperback edition.

[Download to continue reading...](#)





[DMCA](#)