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Soggetti	Biomedical engineering Biochemistry Clinical biochemistry Biotechnology Diagnosis, Laboratory Biomedical Engineering/Biotechnology Biochemistry, general Medical Biochemistry Laboratory Medicine
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Common clinical laboratory hazards and waste disposal -- Blood collection and preservation -- Quality Control in laboratory -- Automation in clinical laboratory -- Photometry-Colorimeter and Spectrophotometer -- Preparation of general laboratory solutions and buffers -- Examination of urine for normal constituents -- To perform qualitative tests for urinary proteins -- To determine the quantity of proteins in urine sample using Biuret reaction -- To estimate the amount of total protein and albumin in serum and to find A/G ratio -- To perform qualitative test for reducing substances in urine -- Quantitative analysis of reducing sugars in urine -- Estimation of blood glucose levels by Glucose Oxidase method -- Estimation of blood glucose levels by Folin and Wu method -- To perform Glucose Tolerance Test -- Estimation of urea in serum and urine -- To determine urea clearance -- To estimate creatinine level in serum and urine by Jaffe’s reaction -- To determine creatinine clearance -- To

determine the uric acid concentration in serum and urine -- Estimation of total calcium in serum and urine -- Estimation of inorganic phosphorus in serum and urine -- To estimate the amount of total cholesterol in serum -- To estimate total and direct bilirubin in serum -- To determine Alanine and Aspartate Transaminases activity in serum -- To estimate the activity of alkaline phosphatase in serum -- To estimate the activity of acid phosphatase in serum -- To determine serum and urinary amylase activity -- To estimate the activity of lipase in serum -- Qualitative analysis of ketone bodies in urine -- Qualitative test for bile pigments and urobilinogen in urine -- Determination of total lactate dehydrogenase activity in serum -- To measure the activity of Creatine kinase-MB and Total Creatine kinase in serum -- Analysis of Cerebrospinal Fluid for proteins and sugars -- To analyze lipid profile from given serum sample -- To determine sodium and potassium in serum by using Flame photometry -- To perform Radioimmunoassay -- To perform Enzyme linked Immunosorbant assay -- Some important case studies.

Sommario/riassunto

This book is a practical guidebook in biochemistry, for medical as well as life sciences' students. The book covers reference values, sample collection procedure and detailed protocol to perform experiments. Each experiment starts with a brief introduction of the protocol, followed by specimen requirements and procedure. The procedures are presented in a very lucid manner and discuss details of calculations and clinical interpretations,The book is divided into 29 chapters, It offers references, general guidelines and abbreviations and provides principles and procedures of clinical biochemistry tests, along with their diagnostic importance.