

Part I: Lab Practical**1. Types of Leukocytes****2. Identify the Following Tests and answer the questions (probably):**

NAME:	Catalase Test	Oxidase Test	Phenol Red (both 24hrs) Fermentation Test Dextrose: Lactose: Sucrose:	MIR / VP (both 48hrs) Fermentation Test	Citrate Utilization Test (over 48hrs)	Urea Hydrolysis Test (over 24hrs)	Nitrate Reduction Test (over 48hrs)	Phenylalanine Deaminase Test (over 24hrs)
PURPOSE: (test for)	detects free oxygen (O ₂) that is in ETC. MO can synthesize catalase	Identify pathogens by absence or presence of cytochrome C oxide	utilize various carbohydrates (glucose, lactose, sucrose)	MO perform mixed acid fermentat ion	MO ferment glucose	MO utilizes citrate all members of Enterobacteri aceae	MO hydrolyze urea	presence of phenylalanine deaminase diff. members of Enterobacteri aceae & some Proteobacteri ae. Proteins ap. Proteolysis ap.
RESULTS:	2H ₂ O + O ₂	catalyze reduction of cytochrome C By fermentation phenylalanine deaminase	pH color change indicator, gas production	stable acid products	acid to acetoin & 2,3- butanedi ol	citrate permease & citrate lyase	ammonia	nitrate - nitrite nitrate - nitrite - molecular nitrogen
MEDIA:	slide	Q-Sp	differential phenol red broth, Durham tube	MIR/VP broth	Simmons- citrate agar	urea agar	peptone Durham tube	phenylalanine agar
SUBSTRATE:			glucose lactose sucrose	glucose	sodium citrate (C source) & ammonium phosphate (P source)			phenylpyruvic acid
REAGENT/ pH Ind.	Hydroge n peroxide 2H ₂ O ₂	hydrogen reducing agent (fermen tation color ap. it becomes oxidized)	Phenol red pH indicator	methyl red	5% α - naphthol & 40% potassium hydroxide	bromothym ol blue pH ind. (in slant)	phenol red pH Ind.	sulfanilic acid & α - naphthyl am line, zinc
Pos. appearance	bubbles	dark blue/purple	Yellow = acidic (ferments) bubbles in Durham tube	red color	red	Blue = alkalinization	Yellow = < 6.8 red = 7-8- 9.4	red (both reagents) no color (after adding zinc)
Neg. appearance	no bubbles	no color change	No color change, no bubbles	no color change	no color change	no color change	pink = >8.4	green
Oxygen Requirement	Obligate aerobe =				Facultative anaerobe =			
	Obligate anaerobe =				Micro-aerophile =			

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insurance coding privacy security and more EXPANDED Information on physical medicine and rehabilitation EXPANDED Content on specimen collection including wound swab nasal and nasopharyngeal specimen collections **Microbiology** Jacquelyn G. Black,1996 This text follows a body systems approach to microbiology paying attention to real life connections and covering such topics as the characteristics of microbial metabolism growth and genetics Laboratory Fundamentals of Microbiology I. Edward Alcamo,2000-08 Laboratory Applications in Microbiology: A Case Study Approach Barry Chess,2008-09-17 Laboratory Applications in Microbiology A Case Study Approach uses real life case studies as the basis for exercises in the laboratory This is the only microbiology lab manual focusing on this means of instruction an approach particularly applicable to the microbiology laboratory The author has carefully organized the exercises so that students develop a solid intellectual base beginning with a particular technique moving through the case study and finally applying new knowledge to unique situations beyond the case study Microbiology Black,Jacquelyn G. Black,1993 Teaching and Learning Through Inquiry Virginia S. Lee,2023-07-03 Inquiry guided learning IGL refers to an array of classroom practices that promote student learning through guided and increasingly independent investigation of complex questions and problems Rather than teaching the results of others investigations which students learn passively instructors assist students in mastering and learning through the process of active investigation itself IGL develops critical thinking independent inquiry students responsibility for their own learning and intellectual growth and maturity The 1999 Boyer Commission Report emphasized the importance of establishing a firm grounding in inquiry based learning and communication of information and ideas While this approach capitalizes on one of the key strengths of research universities the expertise of its faculty in research it is one that can be fruitfully adopted throughout higher education North Carolina State University is at the forefront of the development and implementation of IGL both at the course level and as part of a successful faculty led process of reform of undergraduate education in a complex research institution This book documents and explores NCSU's IGL initiative from a variety of perspectives how faculty arrived at their current understanding of inquiry guided learning and how they have interpreted it at various levels the individual course the major the college the university wide program and the undergraduate curriculum as a whole The contributors show how IGL has been dovetailed with other complementary efforts and programs and how they have assessed its impact The book is divided into four parts the first briefly summarizing the history of the initiative Part Two the largest section describes how various instructors departments and colleges in a range of disciplines have interpreted inquiry guided learning It provides examples from disciplines as varied as ecology engineering foreign language learning history music microbiology physics and psychology It also outlines the potential for even broader dissemination of inquiry guided learning in the undergraduate curriculum as a whole Part Three describes two inquiry guided learning programs for first year students and the interesting ways in which NCSU's university wide writing and speaking program and growing service learning program support inquiry guided learning Part Four documents how the

institution has supported instructors and how they have supported themselves as well as the methods used to assess the impact of inquiry guided learning on students faculty and the institution as a whole The book has been written with three audiences in mind instructors who want to use inquiry guided learning in their classrooms faculty developers considering supporting comparable efforts on their campuses and administrators interested in managing similar undergraduate reform efforts It will also appeal to instructors of courses in the administration of higher education who are looking for relevant case studies of reform While this is a model successfully implemented at a research university it is one that is relevant for all institutions of higher education *Laboratory Experiments in Microbiology* Christine L. Case,Ted R. Johnson,1984 **The Publishers' Trade List Annual** ,1977 Biology/science Materials Carolina Biological Supply Company,1991

Diagnosis and Treatment of Odontogenic Infections James R. Hooley,1983 **Respiratory Care: Patient Assessment and Care Plan Development** David C. Shelledy,Jay I. Peters,2021-02-08 Respiratory Care Patient Assessment and Care Plan Development Second Edition describes the purpose of patient assessment and then guides the reader through the process of reviewing existing data in the medical record *Lab World* ,1976 Laboratory Experiments in Microbiology Ted R. Johnson,Christine L. Case,2004 Newly revised to accompany Microbiology An Introduction Eighth Edition by Tortora Funke and Case this lab manual includes 57 experiments that demonstrate the broad spectrum of microbiology Intended as a manual of basic microbiological techniques this popular lab manual features applications for undergraduate students in diverse areas including the biological sciences the allied health sciences agriculture environmental science nutrition pharmacy and various pre professional programs Experiments have been refined in this new edition to encourage students to develop critical thinking skills as well as learn basic facts and technical skills Material with direct application to clinical and commercial labs is included wherever possible and increased emphasis is placed on lab safety **Scientific and Technical Books and Serials in Print** ,1984 Medical and Health Care Books and Serials in Print ,1997 **Basic Medical Lab Techniques-Im1 4e** Estridge,Ruth Reynolds,2000-05 **Books in Print Supplement** ,1985 *Books in Print* ,1991

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