

الجامعة السودانية للعلوم والتكنولوجيا

Sudan University of Science and Technology

College of Graduate Studies

**Isolation and identification of *Streptococcus pneumoniae* in
Patients with Lower Respiratory Tract Infection in Khartoum
State**

**العزل و التعرف على السبحية
الرئوية من مرضى يعانون من
إلتهاب بالجهاز التنفسي الأسفل
بولاية الخرطوم**

**A dissertation submitted in partial fulfillment for the requirements
of M.Sc. in Medical Laboratory Science (Microbiology)**

By

Eslam Mohamed Abd alwhab Ziedan

B.Sc. in (Medical Laboratory Science)

Sudan University of Science and Technology (2006)

Supervisor

Dr. Mugahid Mohamed El Hassan

June 2009