CERTIFICATION

This is to certify that this project report titled 'Analysis of the Microbial Profiles of Wash Hand Basins in Covenant University' was compiled by THOMAS EJOR VALERIE ONYINYECHUKWU with the matric number 14CQ017699 in the Department of Biological Sciences, Covenant University under the supervision of PROF. SOLOMON U. ORANUSI.

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DECLARATION

I hereby declare that this project report titled "Analysis of the Microbial Profiles of Wash Hand Basins in Covenant University" was written by me. The information in this report is credible and appropriately referenced.

THOMAS EJOR, VALERIE ONYINYECHUKWU

14CQ017699

DEDICATION

I dedicate this report to the Almighty God, Jesus Christ for all He has done and is doing for me. Thank You Jesus.

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ABSTRACT

The human hands play host to many microorganisms. These microbes are a compilation of the normal flora and transitory microorganisms which is because the hand is often in contact with surfaces. Transitory microorganisms and the normal flora of the hand can therefore be found in wash hand basins due to wash-outs and environmental factors. This study assessed the occurrence of microorganisms in wash hand basins around Covenant University. A total of 70samples from wash hand basins in Laboratories, Cafeteria and Lavatories were collected by using sterile swab sticks moistened with peptone water and the resulting swabs plated on Nutrient Agar, MacConkey Agar, Mannitol Salt Agar, Potato Dextrose Agar, and Salmonella-Shigella Agar using the pour plate method. Plates were assessed for total aerobic plate count (TAPC), coliforms and organisms of interest. The isolates were subjected to antibiotics sensitivity test. All (100%) swabs were positive for the presence of microorganisms. Major organisms isolated were *Aspergillus spp, Staphylococcus spp, Penicillum, Fusarium*, *Salmonella spp, Pseudomonas spp* and Yeast. This study has shown the presence of a wide array of organisms including pathogenic organisms not normally flora on human skin. Adequate sanitation of wash hand basins is advocated to help prevent cross contamination.