

**PHYTOCHEMICAL SCREENING OF THE CRUDE PEELS FROM**  
*Punica granatum L.*

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This Final Year Project Report entitled “**Phytochemical Screening of the Crude Peel from *Punica granatum L.***” was submitted by Amirnur bin Abd Masarik, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Chemistry, in the Faculty of Applied Sciences, and was approved by

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## ABSTRACT

Pomegranate is the fruit that has many beneficial to the human being. The pomegranate peel almost has 78% of all and being waste. This study was conducted to enhance the wasteful of the pomegranate peel because it has many useful in preserving the food. The whole fruit peel was extracted using soxhlet extraction method using three solvents which is hexane, dichloromethane (DCM) and methanol. The methanol extract has 52.4%, DCM extract has 2.62% and hexane extract has 2.93%. Thin Layer Chromatography (TLC) profile of the crude extracts pomegranate peel was established using methanol:chloroform mobile phase. The antibacterial activity of the crude extract pomegranate peel was tested against *E.coli*, *Salmonella*, *S. aureus* and *B. subtilis*. The inhibition zone was seen for the each of the crude extract. Methanol extract shown good inhibition against bacteria *Salmonella* and *B. subtilis* while hexane extract showing best inhibition against bacteria *E. coli* and *S. aureus*. The antioxidant activity of the extracts was using DPPH assay and experienced against ascorbic acid that has strong antioxidant activity. From the three extraction of the solvent used, methanol extract was most favourable as it shown high antioxidant activity.