# **UNIVERSITI TEKNOLOGI MARA**

# SUSTAINABLE DESIGN: RATTAN FOR OFFICE GREEN FURNITURE

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Design Report submitted in partial fulfilment of the requirements for the degree of

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### CANDIDATE'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any other degree or qualification.

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#### **CHAPTER 01 INTRODUCTION**

#### 1.0 Abstract

This report writing explains and discusses the environmental issues about sustainable design. The researcher focuses on the sustainable material which is Rattan. Rattan is a very good material mainly because it is lightweight, durable and to a certain extent flexible which can be shaped into any free form compared to other sustainable materials. The keywords of this topic divided into four which are Sustainable design, Rattan, Rattan Furniture Design and Office Green Environment. The researcher will explain in depth these four keywords in this report writing. The main problem and issue regarding this topic is Malaysian rattan furniture craft tends to be bulky which waste materials to make certain product or craft. This problem will effect and create problem of the availability of the raw materials. So, the purpose of this study is to design functional form of rattan for Office Green Furniture without wasting rattan raw materials and the same time maintain our traditional identity in line with the modern furniture design.

## 1.1 Background Study

Rattans are spiny climbing palms that belong to the palm family. The world's rattan supply comes from Malaysia and other Asian countries. Rattan is one of the sustainable materials which are familiar to nature. Generally raw rattan is processed into several products to be used as materials in furniture making. The remaining core of rattan can be used for various purposes in furniture making. Rattan is very good material mainly because it is lightweight, durable and to a certain extent and flexible as it can be shaped into any form compared to other sustainable materials. Rattans are extensively used for making furniture and baskets. Cut into sections, rattan can be used as wood to make furniture. Rattan accepts paints and stains like many other kinds of wood, so it is available in many colors and it can be worked into many styles.