This research was inspired by the conceptual framework of brand equity which is developed by Yoo et al. (2000) with a little modification. The concept stated that brand equity is created not only by some dimensions of brand equity such as brand awareness, brand association, perceived quality and brand loyalty but also created by marketing activities called antecedents of brand equity. It is stated that marketing activities carried out by companies can increase or even decrease brand equity. The research of brand equity was done by constructing a hypothesis model which consist of the variables of brand equity dimensions: brand awareness with strong brand association, perceived quality and brand loyalty, and also variables of marketing activities measured through the consumer perception towards price, advertisement intensity and distribution intensity. The data was collected from 100 IPB (Institut Pertanian Bogor) students in Bogor. The analysis technique is the multicolinearity measurement with structural equation modeling (SEM) assisted by a computer application LISREL (Linear Structural Relationships) 8.51 version. The output analysis of SEM indicates that the hypothesis model could not clearly explain the empirical facts collected from the questionnaires, thus an adaptation of the structural model was done by creating an alternative model. The modification of the model indicated that the second alternative structural model could be accepted (close-fit) based on empirical facts. The second alternative structural model indicated that the brand equity of Sampoerna A Mild cigarettes was created by two dimensions: brand loyalty and brand association. The estimation of parameter shows that brand loyalty significantly has a positive correlation towards brand equity. Whereas the brand association does have a positive correlation towards brand equity but not significant. The estimation of parameter also shows that price, advertisement intensity and distribution intensity significantly has a positive correlation towards brand equity.