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Document Title : *On finite mixture of two-component gompertz lifetime model*
حول نموذج زمن الحياة لخيط محدود من اثنين من مكونات جومبرتز

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Abstract : As a growth model, the Gompertz distribution is becoming an important model both on theoretical and practical grounds, specially in epidemiological and biomedical studies. In this thesis, the Gompertz distributions (one- and two-parameter cases) and their finite " mixtures are described, some of their properties investigated and the identifiability of their finite mixture is established. The main objective of the study is the estimation of parameters, reliability and hazard rate functions when the underlying model is a finite mixture of two Gompertz components. The estimation is based on Type I and Type II censored samples. The methods used for estimation are the classical (maximum likelihood) method and the Bayes method (using Lindley's approximation form). The estimated mean squared-errors are used to compare the maximum likelihood and Bayes estimates (using the left truncated exponential distribution as a prior), via simulation study