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<b>14.Title</b>	Stochastic behaviour of a system with major and minor repair by varying workload
<b>Conference</b>	International Conference on Present Practices and Future Trend in Quality and Reliability; Indian Statistical Institute(ISI) ; Calcutta.
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<b>Abstract</b>	Stochastic behavior of the system has been studied by using exponential distribution. The unit may be repaired with major and minor repair . Initially, unit is operative. The unit may fail during operation. After the major repair, the unit becomes as good as new, and after the minor repair, the same unit starts operation. The workload on the system increases and decreases randomly. As the workload increases the unit may fail than the major repair is required as the system needs. The failure of operative unit is due to some different factors and major or minor repairs are required to make it operative. Failure time distributions of the units are implicit to be exponential with different parameters, while repair time distributions are subjective, i.e. time dependent. Using the regenerative point technique, we obtain the following measures of reliability: ● Steady state transition probabilities and Mean Sojourns times. ● Distribution of time to system failure (TSF) and its mean (MTSF) ● Pointwise and steady state availability of the system ● Probability that the repairman is busy. ● Expected number of visits by the repairman. Further, for some arbitrary assumed values we calculates the above terms by using the Gamma and Non Parametric distributions, which help the system designers and system engineers to select and construct the more reliable system.