## **List of Tables**

4.1	Analytic expressions for various quantities studied in RTN and NMD models	46
4.2	Various quantum channels, introduced at the beginning of Sec. (4.6), with their	
	Kraus operators and the quantumness using commutation based measure $\mu$ =	
	$\max_{\rho_a,\rho_b} \mathcal{M}(\rho'_a,\rho'_b)$ . For the sake of comparision, the corresponding results based	
	on the coherence based measure $Q_{C_{l_1}}$ [107] are also provided. Here, $\tilde{\xi} = \frac{5}{2}(\alpha - 1)$	
	$1)^{2}(1-\xi)^{2}$ and $\tau = \frac{-2}{\gamma(2n+1)} \ln\left[\frac{1}{6+4n+n^{2}}\right]$ [107].	68
5.1	Various witnesses of nonclassicality that are investigated for different configura-	
	tions, both in the absence as well as in the presence of external field characterized	
	by $\chi$ . Here, a tick indicates the presence of a nonclassical feature characterized by	
	the nonclassicality witness mentioned in the first column of the same row, while	
	a cross is the indicator of failure in the detection of that nonclassicality feature.	
	It clearly emerges that the AA configuration is more suited for observing various	
	facets of nonclassicality in the system.	94