CORONA: A SIMULATION STUDY

Distribution Tables:

Table No. 1		
Description of experiment		Value
Population of the town (P)		2000
Count of major service providers (S)		60
Count of known infected persons (IR)		5
Result	Count of person who need to be tested	
Without any social distancing (T100)	Mean: 2000 | Standard Deviation: 0.00	
With social distancing reducing contacts to 50% (T50)	Mean: 1998 | Standard Deviation: 1.17	
With social distancing reducing contacts to 33% (T33)	Mean: 1957 | Standard Deviation: 14.16	
With social distancing reducing contacts to 50% with assigned service provider (TC)	Mean: 1969 | Standard Deviation: 3.34	

Table No. 2		
Description of experiment		Value
Population of the town (P)		2000
Count of major service providers (S)		160
Count of known infected persons (IR)		100
Result	Count of person who need to be tested	
Without any social distancing (T100)	Mean: 1998 | Standard Deviation: 0.80	
With social distancing reducing contacts to 50% (T50)	Mean: 1998 | Standard Deviation: 1.48	
With social distancing reducing contacts to 33% (T33)	Mean: 1997 | Standard Deviation: 2.32	
With social distancing reducing contacts to 50% with assigned service provider (TC)	Mean: 1922 | Standard Deviation: 3.98	

Table No. 3		
Description of experiment		Value
Population of the town (P)		5000
Count of major service providers (S)		150
Count of known infected persons (IR)		30
Result	Count of person who need to be tested	
Without any social distancing (T100)	Mean: 4999 | Standard Deviation: 0.67	
With social distancing reducing contacts to 50% (T50)	Mean: 4971 | Standard Deviation: 7.30	
With social distancing reducing contacts to 33% (T33)	Mean: 4944 | Standard Deviation: 14.31	
With social distancing reducing contacts to 50% with assigned service provider (TC)	Mean: 4899 | Standard Deviation: 18.40	

Table No. 4		
Description of experiment		Value
Population of the town (P)		10000
Count of major service providers (S)		300
Count of known infected persons (IR)		5
Result	Count of person who need to be tested	
Without any social distancing (T100)	Mean: 9995 | Standard Deviation: 2.39	
With social distancing reducing contacts to 50% (T50)	Mean: 9925 | Standard Deviation: 14.33	
With social distancing reducing contacts to 33% (T33)	Mean: 9915 | Standard Deviation: 16.56	
With social distancing reducing contacts to 50% with assigned service provider (TC)	Mean: 9770 | Standard Deviation: 21.57	