| Paper number | 1 | 2\*\*\*\* | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | PSO |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Algorithm | Growth simulation Algorithm | dynamic programming search method | Bacterial foraging solution |  |  | FUZZY  AND REAL CODED GENETIC ALGORITHM |  |  | Genetic algorithm |  |  |  |
| Type of the device used | capacitors | DGs | capacitors |  |  | capacitor |  | capacitor | DGs |  |  |  |
| sizes | 1200  639  200 | 1000  7000  5500 | 600  900  300  300  450 |  |  | 20  21  22  23  24  25  26 |  | 19  25 | 610  610  610 |  |  |  |
| Location  (bus num) | 19  22  20 | 27  25  34 | 26  5  29  21  33 |  |  | 683  145  144  143  143  143  228 |  | 1050  750 | 25  10  17 |  |  |  |
| Active Power loss(KW) | 169.1483 | 75.6 | 161.4153 |  |  | 168.9548 |  | 168.0182 | 112 |  |  |  |
| Reactive power loss (KVAR) | 48.9909 |  | 47.2378 |  |  | 49.4048 |  | 48.9880 | 33.4359 |  |  |  |
| Minimum Voltage | 0.9492 | 0.9871 | . 0.9495 |  |  | 0.9491 |  |  | 0.9640 |  |  |  |