## **Machine Learning – CSE11**

## Lab 6 (Genetic Algorithms)

## $\bullet \quad \underline{Reference: https://towardsdatascience.com/continuous-genetic-algorithm-from-scratch-with-python-ff29deedd099} \\$

Batch No	USN	Selection	Pairing	Mating	Mutations	Termination Criteria
1	1MS17CS124 1MS17CS900	Roulette wheel selection	Fittest	Single Point	Gauss / Reset	Maximum Fitness
2	1MS17CS118 1MS17CS123	Fittest half selection	Fittest	Two Points	Gauss / Reset	Maximum Average Fitness
3	1MS18CS422 1MS18CS402	Random Selection	Fittest	Single Point	Gauss / Reset	Maximum Number of Generations
4	1MS18CS409 1MS18CS420	Roulette wheel selection	Random	Two Points	Gauss / Reset	Maximum Similar Fitness Number
5	1MS17CS140 1MS17CS120	Fittest half selection	Random	Single Point	Gauss / Reset	Maximum Fitness
6	1MS17CS115 1MS17CS128	Random Selection	Random	Two Points	Gauss / Reset	Maximum Average Fitness
7	1MS17CS144 1MS17CS146	Roulette wheel selection	Weighted random	Single Point	Gauss / Reset	Maximum Number of Generations
8	1MS17CS153 1MS18CS418	Fittest half selection	Weighted random	Two Points	Gauss / Reset	Maximum Similar Fitness Number
9	1MS18CS401 1MS18CS417	Random Selection	Weighted random	Single Point	Gauss / Reset	Maximum Fitness
10	1MS18CS404 1MS18CS416	Roulette wheel selection	Fittest	Two Points	Gauss / Reset	Maximum Average Fitness
11	1MS17CS143 1MS17CS148	Fittest half selection	Fittest	Single Point	Gauss / Reset	Maximum Number of Generations
12	1MS17CS117	Random	Fittest	Two Points	Gauss /	Maximum

	1MS17CS138	Selection			Reset	Similar Fitness Number
13	1MS17CS130 1MS17CS145	Roulette wheel selection	Random	Single Point	Gauss / Reset	Maximum Fitness
14	1MS18CS421 1MS18CS411	Fittest half selection	Random	Two Points	Gauss / Reset	Maximum Average Fitness
15	1MS18CS407 1MS18CS403	Random Selection	Random	Single Point	Gauss / Reset	Maximum Number of Generations
16	1MS17CS133 1MS17CS149	Roulette wheel selection	Weighted random	Two Points	Gauss / Reset	Maximum Similar Fitness Number
17	1MS17CS135 1MS17CS136	Fittest half selection	Weighted random	Single Point	Gauss / Reset	Maximum Fitness
18	1MS17CS403 1MS18CS410	Random Selection	Weighted random	Two Points	Gauss / Reset	Maximum Average Fitness
19	1MS18CS419 1MS18CS414	Roulette wheel selection	Fittest	Single Point	Gauss / Reset	Maximum Number of Generations
20	1MS18CS400 1MS18CS408	Fittest half selection	Random	Two Points	Gauss / Reset	Maximum Similar Fitness Number
21	1MS17CS125 1MS17CS129	Random Selection	Weighted random	Single Point	Gauss / Reset	Maximum Fitness
22	1MS17CS152 1MS17CS114	Roulette wheel selection	Fittest	Two Points	Gauss / Reset	Maximum Average Fitness
23	1MS17CS126 1MS17CS139	Fittest half selection	Random	Two Points	Gauss / Reset	Maximum Number of Generations