	Names Praddycum Wladerar
	5 COA Assignment - 04 class-BE compss Page: PRN=SITIIO38 Date: 1 1
(1)	Enlist the basic steps of genetic algorithm with flow chart
	Basic steps of genetic Algorithm:- a) Initialize a population with randomly generated individuals
	or Initialize a population with randomly generated maintainers
	of evaluate the fitness value of each
	b) scleet two inclividuals from the population with probability
	proportional to their respective filmess values
	of Apply conssover on the two individuals selected with a
	probability equal to coossover rate d> Apply whitation with a probability equal to mutation vate
	e) Repeate from 6 to a until enough numbers are generated
	to be to a confidence of the c
1	Pr Confinue till Stopping criteria is met
	Tonnue Till Stopping michaels in a
1- AG	(Start)
	the policy of all the sound of the Allin
	Generate mitial population
	200 Hill die
	Evaluate individual titness
1	alay X
	Stopping
	(intermet) (Stop)
1	July 100 801 2010 10 21 11 14
(1)5 50 3A	distri francosos ino algais o no colorado (i)
	Generate new population perform Selection of apply crossover of mutation
	Selection of apply crossover of mutation
	1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
ani	A dis O is da la
(f.5)	Explain Genetic Operators: Different genetic operators are :-
	Différent generic Operators are ;
	a) Unssover 1-

	Page: (6) Date: / /
Lods	i) After Selection phase, crossover is portorned
	ii) It is performed on the best chromosomes which are
2 audill	Selected ab parrents
	ili? This operations produces offerings
della	in Conssover is applied to get a better shing
	My Conssover is applied to get abother shing Different conssover operators are 2
palig	(2) 1) Single point conssover
	2) Two point Crossover
1/00	3) Multipoint Conssover
historia	4) Writom Crossover
	3) Matrix conssover
	Hora si mastra enigente dit quattra) 19
	b) Mutation:
	it It is permanent image in the sequences of ONA
	ii) After Osossover, mutation is performed
	1117 Different types s- Point
	Substitutions
	Swapping W
	Scramble
	(grigget)
	e) Immersion
	i) It is a occurreding technique
	ii) Operates on a single chromosomes of involve the order
	of element and and a second
	Lastedonat recorded from & mitigate
	d) Deletion:-
	is Usually deletion, operator is used in Combination with
	i) Usually, deletion operator is used in Combination with other operators like duplications, regenerations.
	addition etc
	-1 (330 2200) ()

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e) Deletion of Duplication 1) 2 or 3 bits are selected at random of the previous bits are duplicated
0010010 Before 00100 At
1) Deletion of Regeneration i) Bits between 2 crosspoints are deleted of regenerated randomly
1 1 0 1 0 1 0 0 Deletion 1 1 0 1 0 1 0 Regeneration
Regenerated bits