

FACULTY OF EGINEERING AND TECHNOLOGY

Soft Computing LECTURE -26

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OUTLINE

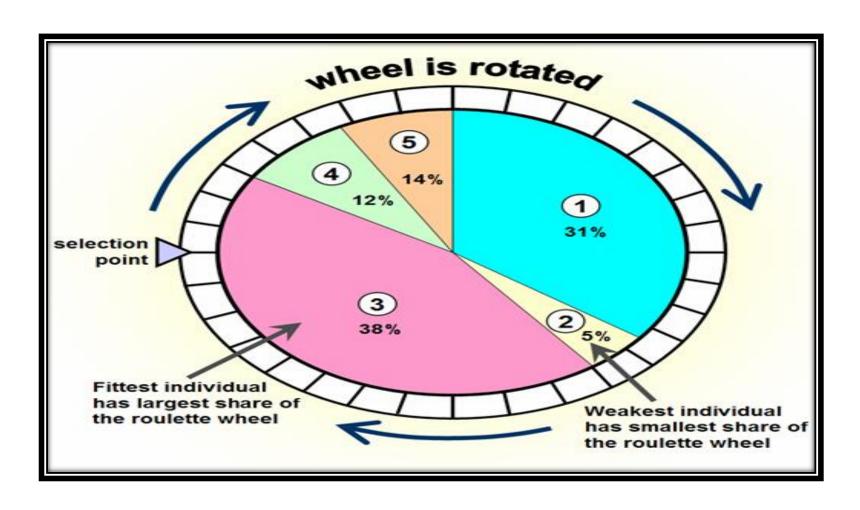
- Selection
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- •MCQ



SELECTION

Types of selection

1. Roulette Wheel Selection



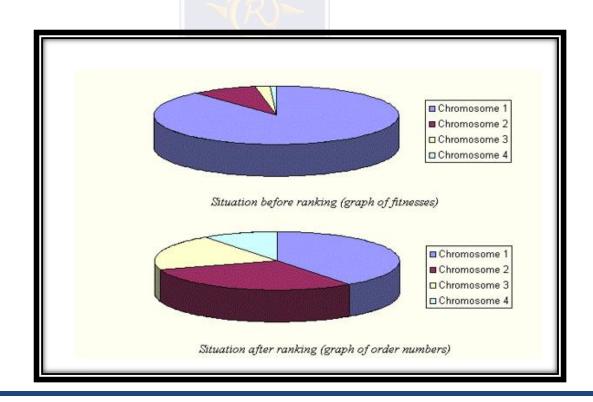
SELECTION

Types of selection

2. Random Selection

- ☐ This technique randomly selects a parent from the population.
- In terms of disruption of genetic codes, random selection is a little more disruptive, on average, than roulette wheel selection

3. Rank Selection



GENETIC ALGORITHM

Tournament Selection

□An ideal selection strategy should be such that it is able to adjust its selective pressure and population diversity so as to fine-tune GA search performance.

□Unlike, the Roulette wheel selection, the tournament selection strategy provides selective pressure by holding a

tournament competition among Nu individuals.



MULTIPLE CHOICE QUESTION

- 1. What happens if chain-termination mutation is in the S gene?
- a) Cell lysis is blocked
- b) Growth of cells containing low levels of packaging proteins is not allowed
- c) The lysis of cells is not carried artificially
- d) Packaging is not carried out efficiently
- 2. Which of the following is used for blocking the phage-encoded recombination?
- a) Mutation in D gene
- b) Mutation in E gene
- c) Red mutation
- d) Mutation in S gene
- 3. Which of the following is not a consequence of deletion in the b region?
- a) Excision of the prophage on induction is prevented
- b) It reduces the amount of endogenous phage DNA in the packaging mix
- c) It reduces the amount of exogenous phage DNA in the packaging mix
- d) It reduces the level of background non-recombinant phage

- 4. If a single system is used for packaging, there are increased chances of endogenous material being packed.
- a) True
- b) False
- 5. The cl function can be scanned in order to check whether the recombinants are present or not. Which of the following doesn't hold true?
- a) The cl protein is required for the formation of lysogen
- b) The plaques formed are turbid in the case if the cl gene is active
- c) The plaques formed are clear in the case if the cl gene is inactive
- d) hflA mutant host reduces the amount of cll stability

REFERENCES

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