

**B. Tech. Sem - VIII (Inf. Tech.) (2014 COURSE) (CBCS) :
SUMMER - 2019**

SUBJECT: 2) ELECTIVE-III: GENETIC ALGORITHM

Day: Saturday
Date: 01/06/2019

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

S-2019-2913

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data if necessary.

Q.1 What are the applications of evolutionary computations? **(10)**

OR

Q.1 What are the advantages and limitations of Genetic algorithms? **(10)**

Q.2 Explain the use of Fitness Scaling in evolutionary optimization. **(10)**

OR

Q.2 If the population size in a genetic algorithm is restricted to 1, what search algorithm does it correspond to? Explain in brief. **(10)**

Q.3 Explain the working of 'flipping' as mutation operator in Binary coded genetic algorithm. **(10)**

OR

Q.3 Briefly describe what is Multi- objective and Combinatorial optimization? **(10)**

Q.4 Distinguish between Roulette and Tournament selection approaches. **(10)**

OR

Q.4 Write a short note on Independent Sampling Genetic algorithm. **(10)**

Q.5 Write a short note on 'Haploid Genetic programming with dominance'. **(10)**

OR

Q.5 Describe the characteristics of Genetic programming in detail. **(10)**

Q.6 How Genetic algorithm can be applied for job scheduling problems. Explain with suitable example. **(10)**

OR

Q.6 Explain the applications of Combinatorial optimization problem. **(10)**

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