## B. E. POWER ENGG. 3RD YEAR 2ND SEMESTER EXAMINATION 2023

## **Optimization Techniques**

TIME: THREE HOURS	FULL MARKS:100
1. Describe the conditions for optimality ?	20 [CO1]
2. Describe linear programming method and quadratic programming m	nethod 20 [CO2]
3. Describe briefly Hopfield neural network.	20 [CO3]
OR	
3. Give a note on gravitational search algorithm.	20 [CO3]
4. Describe briefly particle swarm optimization technique.	20 [CO4]
OR .	
4. Describe briefly cuckoo search algorithm.	20 [CO4]
<ul><li>5. a) What is Pareto optimal solutions?</li><li>b) Describe briefly nondominated sorting genetic algorithm-II.</li></ul>	5 [CO5] 15 [CO5]