Reg. No. : | | | | | | | | | | |

Question Paper Code: 52737

M.E. DEGREE EXAMINATION, NOV 2016

Elective

VLSI Design

15PVL505 - GENETIC ALGORITHMS AND THEIR APPLICATIONS

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

(5 x 20 = 100 Marks)

1. (a) Write about GA operators with an example relevant to image processing. (20)

Or

(b) Explain Genetic Algorithm terminology with an example. (20)

2. (a) Illustrate about automatic routing with neat sketch. (20)

Or

(b) Discuss technology mapping for Field Programmable Gate Array (FPGA). (20)

3. (a) Discuss Hybrid GA for ratio cut Partitioning. (20)

Or

(b) How the unified algorithm SAGA (Simulated Annealing Genetic algorithm) is used in macro cell placement. (20)

4. (a) Discuss genetic algorithms based test generation with neat flowchart. (20)

Or

(b) Discuss Steiner Problem in Graph (SPG) with relevant to macro cell routing. (20)

5. (a) Illustrate application of GA to peak power estimation. (20)

Or

(b) Explain parallel genetic algorithm based Automatic Test Generation (ATG). (20)

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