Code No: C5704 **R09**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M. Tech I Semester Examinations, October - 2015
ALGORITHMS FOR VLSI DESIGN AUTOMATION
(VLSI System Design/ VLSI Design)

Time: 3hours **Max.Marks:60**

Answer any five questions
All questions carry equal marks
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1.a) Explain the Breadth-search algorithm with an example.
b) Distinguish between problem and instance. [8+4]

2.a) Explain the following:
i) Linear Programming ii) Inter Linear Programming
b) Write short notes on Genetic Algorithms. [8+4]

3.a) Write the applications of compaction.
b) Explain Optimization problems related to floorplanning. [6+6]

4.a) What is meant by Routing? Explain Local Routing Problems.
b) Explain two-level logic synthesis. [6+6]

5.a) Explain Iterative and Conditional Data Flows.
b) Define Mobility based scheduling. [6+6]

6. Explain the Physical Design Cycle of FPGA with a neat block diagram. [12]

7. Explain different MCM routing algorithms. [12]

8. Writes short notes on the following:
a) 2.5-D integration placement in MCM
b) Routing algorithms for segmented model.
c) Super node construction. [4+4+4]

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