

Question Paper

Exam Date & Time: 27-Nov-2018 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

SCHOOL OF INFORMATION SCIENCES

SECOND SEMESTER MASTER OF ENGINEERING - ME (VLSI DESIGN)

Physical Design [EDA 616.8]

Marks: 100

Duration: 180 mins.

END SEMESTER DEGREE EXAMINATION NOVEMBER 2018

Answer all the questions.

- 1) Explain the synthesis design constraints (sdc) (10)
- 2) Explain about Block and chip level IC Design (10)
- 3) Discuss about placement and routing blockages and their importance in physical Design flow (10)
- 4) Explain about routing and its channellings in deep Nano meter technologies (10)
- 5) Explain about scan chain and its usage in ASIC physical design flow (10)
- 6) Discuss about STD cell libraries and its usage in semi-custom physical design flow (10)
- 7) Explain about RC extraction and its impact on Static Timing Analysis (STA) (10)
- 8) Discuss advantages and disadvantages of custom and semi-custom IC design with example (10)
- 9) Explain about Multi-Mode and Multi Corner Analysis (MMMC) in physical design flow (10)
- 10) Discuss about Physical verification such as Design Rule Check (DRC), Layout Versus Schematic (LVS) and Electrical Rule Check (ERC) (10)

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