

# Question Paper

Exam Date & Time: 25-Apr-2018 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

### SCHOOL OF INFORMATION SCIENCES SECOND SEMESTER ME (VLSI DESIGN)

#### DEGREE EXAMINATION- APRIL

Wednesday, April 25, 2018

Time : 10:00am to 1:00pm

#### Universal Verification Methodology [EDA 610]

Marks: 100

Duration: 180 mins.

### Answer all the questions.

- 1) Explain the functionality of following components with example. (10)  
  
Transactor (Agent)  
Scoreboard
- 2) What is randomization? Explain the following in SystemVerilog randomization with example. (10)  
  
Rand  
Randc  
Constraint block  
(2+2+2+4= 10 Marks)
- 3) Explain the functionality of following components with example. (10)  
  
Inheritance  
Abstraction (5+5= 10 Marks)
- 4) Explain about uvm\_component class with example. (10)
- 5) Write a note on UVM Integration level environment. (10)
- 6) Explain Clean up phase in UVM Testbench. (10)
- 7) Illustrate UVM Factory coding convention 1 and convention 3 with example. (10)
- 8) Explain different types of Object Overrides in UVM. (10)
- 9) Describe UVM sequences and tests with example. (10)
- 10) Explain different UVM reporting methods with examples. (10)

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