

# Question Paper



## MANIPAL UNIVERSITY

**SCHOOL OF INFORMATION SCIENCES**  
**SECOND SEMESTER MASTER OF ENGINEERING - ME (VLSI DESIGN)**  
**DEGREE EXAMINATION - NOVEMBER 2017**  
**DATE : Saturday, November 18, 2017**  
**TIME : 10:00AM - 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)
  - a. Monitor
  - b. Scenerio Generator
- 2) Explain Arrays in SystemVerilog. (10)
- 3) Explain the functionality of following with example (10)

(5+5=10 Marks)

  - a. Encapsulation
  - b. Polymorphism
- 4) Explain the functionality of following with example (10)

(5+5=10 Marks)

  - a. uvm\_object class
  - b. uvm\_component class
- 5) Explain the functionality of following (10)

(5+5=10 Marks)

  - a. Block level environment
  - b. Integration level environment
- 6) Explain different components in UVM Testbench. (10)
- 7) Illustrate UVM Factory coding convention 2 and convention 3 with example. (10)
- 8) Explain about UVM factory overrides. (10)
- 9) Write a note on creation of transaction using uvm\_sequence with an example. (10)
- 10) Explain the functionality of uvm\_driver with example. (10)

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