

**MANIPAL UNIVERSITY****FIRST SEMESTER ME VLSI DESIGN DEGREE EXAMINATION – NOVEMBER 2015****SUBJECT: EDA 617 – VERIFICATION**

Friday, November 20, 2015

Time: 10:00 – 13:00 Hrs.

Max. Marks: 100

1. What is Testbench? Explain the any Five importance of verification.  
(10 marks)
2. What is Functional Verification? Explain with respect to Black-Box Verification.  
(10 marks)
3. Explain the Event driven simulation with an example.  
(10 marks)
4. Explain the code coverage with an example.  
(10 marks)
5. Explain with neat diagram, application of different levels of verification.  
(10 marks)
6. Explain the following in systemVerilog with an example:
  - 6A. Packed Array
  - 6B. Unpacked array
  - 6C. Union
  - 6D. Queues

(2½ marks × 4 = 10 marks)
7. Bring out the difference between the following:
  - 7A. Fork/join
  - 7B. Fork/join\_any
  - 7C. Fork/join\_none
  - 7D. Fork/join\_disable

(2½ marks × 4 = 10 marks)
8. What is self-checking? Explain with an example.  
(10 marks)
9. Explain directed stimulus with an example.  
(10 marks)
10. What is transaction level modeling and explain its characteristics.  
(10 marks)

