

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2018  
(Second Semester)

Branch - APPLIED ELECTRONICS

ADVANCED DIGITAL SYSTEM DESIGN

Time : Three Hours

Maximum : 75 Marks

SECTION -A (30 Marks!)

Answer ALL questions

ALL questions carry EQUAL Marks ( 5 x 6 = 30)

- 1 a Define the entity declaration in VHDL.  
OR  
b Describe briefly about the structural modeling,
- 2 a Write a brief introduction to verilog.  
OR  
b Explain about the concatenation operators.
- 3 a Write short note on tri state gates.  
OR  
b Define the working of implicit nets.
- 4 a What is a net declaration assignment and explain its importance?  
OR  
b Describe about the loop statement with an example.
- 5 a Explain the working of PL A.  
OR  
b What is module instantiation and explain about it?

SECTION -B (45 Marks)

Answer any THREE questions

ALL questions carry EQUAL Marks ( 3 x 15 = 45)

- 6 Explain briefly about the package declaration with suitable diagrams.
- 7 Describe in detail about the (i) Relational operator and (ii) Equality operator.
- 8 Explain briefly about the combinational UDP and sequential UDP.
- 9 Discuss in detail about the procedural assignments with examples.
- 10 Explain briefly about the sharing task and functions.