

Code No: H5501/R13

M. Tech. II Semester Regular/ Supplementary Examinations, July-2016

**HARDWARE SOFTWARE CO-DESIGN**

(Embedded Systems)

Time: 3 Hours

Max. Marks: 60

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*Answer any FIVE Questions*  
*All Questions Carry Equal Marks*

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| 1. a | Explain about the generic co-design methodology.                             | 8 |
| b    | What is reactive system co-synthesis? Explain                                | 4 |
| 2. a | Differentiate between finite state machines and program state machines.      | 6 |
| b    | Briefly explain about system communication infrastructure                    | 6 |
| 3. a | Explain about prototyping and emulation environments.                        | 6 |
| b    | Distinguish between control and data dominated architectures.                | 6 |
| 4. a | Discuss about the modern embedded architectures.                             | 6 |
| b    | What are the practical considerations in a compiler development environment? | 6 |
| 5. a | Explain about the compiler techniques for specialized architectures.         | 6 |
| b    | What is meant by coordinating concurrent computations? Explain               | 6 |
| 6. a | Explain in detail the co-design computational model.                         | 6 |
| b    | Discuss about the concept of interface verification.                         | 6 |
| 7. a | Briefly explain about system level specification languages.                  | 6 |
| b    | Discuss about multi-language design.   | 6 |
| 8.   | Write short notes on the following:  |   |
| a    | Memory Architectures   | 6 |
| b    | Lycos System   | 6 |

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