

Code No: H6801/R13

M. Tech. II Semester Supplementary Examinations, May-2017

EMBEDDED-C

(Common to VLSI&ES, ES&VLSI, VLSID&ES, ES and VLSID)

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 basic step to develop embedded software  | 6  |
| b    | What is interrupt? Explain interrupt concept in 8051 microcontroller                                     | 6  |
| 2. a | Write assembly level program for reading and writing bits  | 6  |
| b    | Write assembly level program for Counting goats  | 6  |
| 3. a | Explain in detail about The Project Header with example  | 6  |
| b    | Write assembly level program to display 'Hello Embedded World'   | 6  |
| 4. a | Write assembly level program for creating 50ms hardware delay using Timer 1                              | 6  |
| b    | Explain basic concept of creating hardware timeout with example  | 6  |
| 5.   | Write assembly level program for intruder alarm system suitable for detecting attempted thefts in a home | 12 |
| 6. a | Explain in detail about Creating a portable hardware delay   | 6  |
| b    | Explain about Memory issues in 8051 microcontroller Family   | 6  |
| 7. a | Explain in detail how to select operating system should use in embedded system                           | 6  |
| b    | Explain about Key software components used in intruder alarm system                                      | 6  |
| 8.   | Explain in detail about below terms with example   | 6  |
| a.   | Testing a hardware timeout   |    |
| b.   | more reliable switch interface   | 6  |

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