

Code No: 157CE

**R18**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech IV Year I Semester Examinations, February/March - 2022**

**INTRODUCTION TO EMBEDDED SYSTEMS**

**(Computer Science and Engineering)**

**Time: 3 Hours**

**Max. Marks: 75**

**Answer any five questions  
All questions carry equal marks**

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1. Explain the different characteristics of embedded systems in details. [15]
2. Explain the various purposes of embedded systems with illustrative examples. [15]
- 3.a) What is memory shadowing? What are its advantages?  
b) Explain the role of watch dog timer in embedded system design. [7+8]
4. Discuss on-board and external communication interfaces in detail. [15]
5. Explain the 'high level language' based embedded firmware development. Write its advantages. [15]
6. Explain the different Embedded Firmware Design Approaches. [15]
7. Discuss various activities involved in the creation of process and threads. [15]
8. Explain the role of Integrated Development Environment (IDE) for Embedded Software Development. [15]

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