

Sem-IV

Con. 10-16.

S.Y.Bsc - (I.T.)

Embedded Systems
(3 Hours)

Oct
2016

IP-4334

[Total Marks : 100]

1. Attempt following questions :—
 - (a) Write a short note on watchdog timer. 5
 - (b) Distinguish between microprocessor and microcontroller. 5
2. Attempt any three questions from the following :—
 - (a) Distinguish between RISC and CISC. 5
 - (b) Explain I2C bus in embedded system. 5
 - (c) What are COTS in embedded system ? 5
 - (d) Explain the classification of embedded systems on the basis of complexity. 5
3. Attempt any three questions from the following :—
 - (a) Explain the role of embedded system in automotive domain with an example. 5
 - (b) Explain different automotive communication buses in embedded systems. 5
 - (c) Explain any three characteristics of embedded systems. 5
 - (d) Explain the following operational quality attributes of embedded systems. 5
 - (i) Security
 - (ii) Throughput
4. Attempt any three questions from the following :—
 - (a) Explain the role of an infinite loop? Illustrate with an example. 5
 - (b) Explain the concept of device programmer in embedded systems. 5
 - (c) Explain linking process in embedded systems. 5
 - (d) Write a short note on compiler and cross compiler. 5
5. Attempt any three questions from the following :—
 - (a) What do you mean by memory testing ? Explain data bus test in detail. 5
 - (b) Write a short note on CRC in embedded systems. 5
 - (c) Write a short note on direct memory access. 5
 - (d) Differentiate between SRAM and DRAM. 5
6. Attempt any three questions from the following :—
 - (a) Explain following scheduling algorithms. 5
 - (i) Shortest job first
 - (ii) priority based
 - (b) Enlist steps to develop device driver in embedded systems. 5
 - (c) Explain real-time characteristics of embedded operating systems. 5
 - (d) Write a short note on mutex in embedded operating system. 5
7. Attempt any three questions from the following :—
 - (a) Write a short note on emulator. 5
 - (b) What are the objectives of Embedded product Development Life Cycle ? 5
 - (c) Write short notes on disassembler and decompiler. 5
 - (d) What are the different phases of Embedded product Development Life Cycle ? 5

Embedded Systems Question Papers

Mr. Rohit Manglik



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