S.Y.B.S.C (I.T.) – SEM-IV – Embedded System– $2_{1/2}$ HRS - 75 23/09/2016

NOTE: 1) Diagrams should be Neat and labeled.
2) All Questions are compulsory.
3) Right side indicates marks.

Q.1. Answer the following (Any two) [10]

a. Define embedded system and give difference between embedded system and general purpose computer system?
b. Explain the difference between Big endian and Little endian?
c. Explain USB as communication interface with diagram?
d. Explain I2C in detail?

Q.2. Answer the following (Any two) [10]

a. Write short note on communication interface used in automobiles.
b. Write short note on washing machine.
c. Explain non-operational quality attributes?
d. Write any five characteristics of embedded system.

Q.3. Answer the following (Any two) [10]

a. Explain build process of embedded program in detail?
b. Write short note on device programmer.
c. Explain compiling process in detail?
d. Explain Remote-debugger and all its commands?

Q.4. Answer the following (Any two) [10]

a. Explain ROM memory and its type in detail?
b. Write short note on data bus test.
c. Write a short note on checksum.
d. Write a short note on cyclic redundancy code.

Q.5. Answer the following (Any two) [10]

a. Explain control and status register in detail?
b. Write a short note on embedded operating system.
c. Explain task-state in detail with diagram?
d. Explain what is Ready-list and Idle-task?

Q.6. Answer the following (Any two)

a. Explain embedded system development environment?
b. Explain life-cycle of embedded product development?
c. Explain decompiler and disassembler in detail?
d. List different files generated in cross-compilation process.

munotes.in

Scanned by CamScanner

Q.7. Answer the following (Any three) [15]

a. Write any five purpose of embedded system.
b. Explain any five Operational quality attributes?
c. Explain locating process in detail.
d. Write short note on common memory problems.
e. Explain Device driver philosophy?
f. Explain programmable logic device and its type?

munotes.in

Scanned by CamScanner