Code No: RA410402 **RA**

III B.Tech II Semester Regular Examinations, April/May 2005
EMBEDDED SYSTEMS
(Electronics & Communication Engineering)

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) List out the characteristics of embedded systems. And explain then briefly.
   (b) What are the main design technologies? What are the advantages of each technology?
2. (a) Distinguish between single purpose processor and general purpose processor.
   (b) Design a single-purpose processor that converts two 4-bit inputs into one 8-bit output.
3. (a) Draw the block diagram of a general purpose processor and explain about each block.
   (b) Explain the concept of pipelining with example.
4. (a) What are the software design tools used by embedded system designer? Explain them.
   (b) List out the differences between micro-controllers and Digital signal processors.
5. (a) Write short notes on Harvand architecture.
   (b) Explain architectural features of ADSP21065.
6. (a) Explain about windows CE and QNX real time operating systems.
   (b) Describe the concurrent process model with an example.
7. Describe three computational models used to describe embedded systems and their peripherals. For each model list two languages that can be used to capture it.
8. Briefly describe the three general techniques for improving designer productivity.

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