☆ CAT-1 (/CAT-1)

Dear Students,

Below, I have provided details for studying for CAT-1 examination.

- Kindly note that it is necessary and sufficient to read the book chapters (exact page numbers are provided) of the three books I have pointed to for the examination.
- I understand that you are used to reading slides for the exams. But for this course the slides are just for your reference and may be for your revision before the exam.
- I understand that it is of discomfort to refer to three books, but I promise for the remaining exams CAT -2 and TEE you will only *mostly* study one book, that is, Wayne Wolf book (http://www.amazon.in/Computers-Components-Principles-Embedded-Computing/dp/938126984X/ref=sr_1_1?s=books&ie=UTF8&qid=1467007086&sr=1-1&keywords=Computer+as+Components+3rd+Edition) . Due to the content to be taught for lab and to cover some syllabus simultaneously, I had to require you to read three books for CAT-1.
- All the slides are put in one folder, and zipped for your ease for downloading.
- Feel free to ask any thing that you may require towards preparing for the CAT-1 exam.

Wish you all the best !

Thanks,
Balaji.

Books for Reading

- Raj Kamal Book, Third Edition (http://www.amazon.in/gp/product/933290149X/ref=pd_lpo_sbs_dp_ss_1/277-1013464-6155818?pf_rd_m=A1VBAL9TL5WCBF&pf_rd_s=lpo-top-stripe&pf_rd_r=10QZ3RPBCS642HSK44PF&pf_rd_t=201&pf_rd_p=733112647&pf_rd_i=0070667640)
  - Chapter 1 (1.1, 1.2, 1,3, 1.4, 1.10); Pages 1-20 and Pages 27-28.
  - If you are following a different edition just read the following topics
    - Embedded System
    - Processor Embedded into a System
    - Embedded Hardware Units and Devices in a System
    - Embedded Software in a System and an Overview of Programming Languages
    - Examples of Embedded Systems
- Wayne Wolf, Second Edition (http://www.waynewolf.us/embedded-book-2e/)
  - Chapter Introduction (Pages 1-6),
  - and only the following topics are included (if you are following a different edition):
    - Embedding Computers
    - Characteristics of Embedded Computing Applications
    - Why use Microprocessors?
- 8051 Microcontroller, Kenneth Ayala, 3rd Edition (http://www.amazon.in/8051-Micro-controller-3rd/dp/8131502007/ref=pd_sim_sbs_14_3?ie=UTF8&dpID=51lH3XoDaaL&dpSrc=sims&preST=_AC_UL160_SR137%2C160_&psc=1&refRID=1RK0E4XXHYGD8SRFFH15)
  - Chapter 1, Microprocessors and Microcontrollers (Pages 1-6)
  - Chapter 3, 8051 Architecture, Pages 60 - 72
  - Chapter 5, Moving Data, Full (Pages 131 - 149)
  - Chapter 6, Logical Operations, Full (Pages 151 - 166)
  - Chapter 7, Arithmetic Operations, Full (Pages 169 - 188)

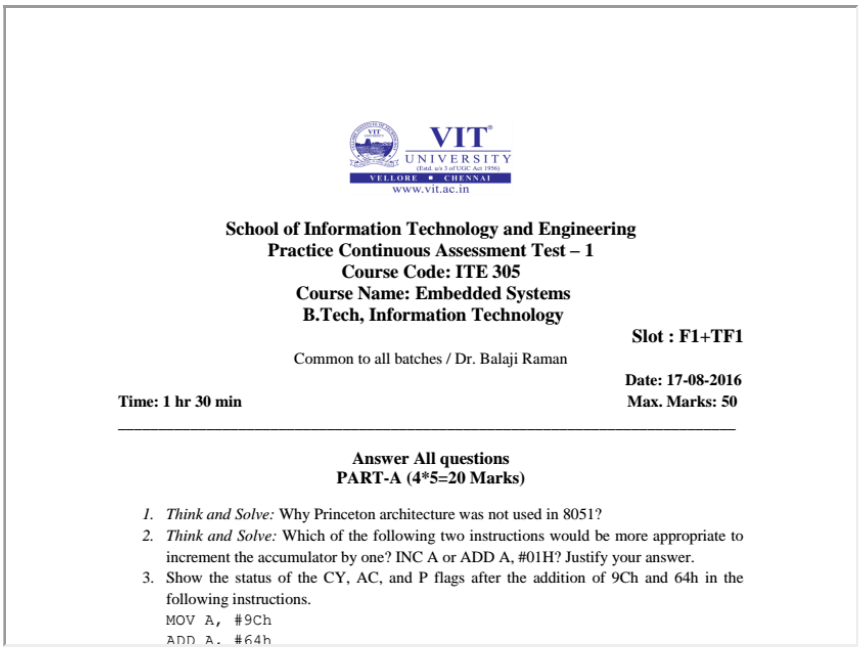
Slides Used in the Class

- You can access the individual files or download the zip folder present in this link. (https://drive.google.com/open?id=0B-2dPTXnV_COaGRXcXZMTE5adW8)

Slides for reference (from other sources)

- Slides for 8051 for the reference text book (https://drive.google.com/open?id=0B-2dPTXnV_COU0xyWDVZTjhhRzg) authored by Muhammed Ali Mazidi et. al.

Practice CAT 1 and CAT Question papers



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School of Information Technology and Engineering
Practice Continuous Assessment Test – 1
Course Code: ITE 305
Course Name: Embedded Systems
B.Tech, Information Technology

Slot : F1+TF1

Common to all batches / Dr. Balaji Raman

Date: 17-08-2016

Time: 1 hr 30 min **Max. Marks: 50**

Answer All questions
PART-A (4*5=20 Marks)

1. *Think and Solve:* Why Princeton architecture was not used in 8051?
2. *Think and Solve:* Which of the following two instructions would be more appropriate to increment the accumulator by one? INC A or ADD A, #01H? Justify your answer.
3. Show the status of the CY, AC, and P flags after the addition of 9Ch and 64h in the following instructions.

```
MOV A, #9Ch
ADD A, #64h
```

Add Discussion