MECHANICAL ENGINEERING DEPARTMENT
MEL816: ANALYSIS OF I.C. ENGINE PROCESSES

MAJOR **2-12-2006**

TOTAL TIME: 2 HOURS **MAXIMUM MARKS 10**

PLEASE BE VERY BRIEF AND TO THE POINT!
USE OF BOOK S AND NOTES NOT ALLOWED
THIS IS PART A
TO BE RETURNED BEFORE TAKING PART B

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1. Differentiate between progressive burning and time loss.
2. What is the Zeldovich mechanism for NOP formation?
3. Why does the CO in the exhaust not follow equilibrium conditions at exhaust temperature?
4. Differentiate between crevice HC and quench HC.
5. Differentiate between two zonc and single zone combustion model.
6. How do you account for ignition delay in the SI engine modeling?
7. How would you account for frietion in the model?
8. How would you estimate the flame specd in the model?
9. What burned gas temperature would you assumc at thc start of combustion in the model?
10. How would you model thc gas exchange process in the model?

RETURN THE ANSWER SCRIPT AND TAKE THE PART 2 QUESTION PAPER AND ANSWER BOOK!