

***B.Tech. Degree V Semester (Supplementary) Examination,
July 2009***

**EC/EB 503 ADVANCED MICROPROCESSORS AND
MICRO CONTROLLERS
(2002 Scheme)**

Time: 3 Hours

Maximum Marks: 100

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|-----------|----|--|------|
| I | a) | Explain the architecture of Intel 8086 with necessary block diagram. | (15) |
| | b) | Explain different registers in 8086. | (5) |
| OR | | | |
| II | a) | Explain different addressing modes in 8086 with suitable examples. | (10) |
| | b) | Explain minimum mode and maximum mode in 8086 with necessary diagrams. | (10) |
| OR | | | |
| III | a) | Explain different program development tools in detail. | (15) |
| | b) | Explain BIOS function calls. | (5) |
| OR | | | |
| IV | a) | Explain instruction set of 8086 with suitable examples. | (15) |
| | b) | Explain DOS function calls. | (5) |
| OR | | | |
| V | a) | Explain with block diagram, the architecture of Intel 80386. | (15) |
| | b) | Explain register organization of 80386. | (5) |
| OR | | | |
| VI | a) | Explain real, protected and virtual modes in 80386. | (15) |
| | b) | Compare 80386 and 80486. | (5) |
| OR | | | |
| VII | a) | Compare Pentium and Pentium Pro architecture. | (6) |
| | b) | Explain | |
| | | i) Branch Prediction | (7) |
| | | ii) Super scalar architecture | (7) |
| OR | | | |
| VIII | a) | Explain RISC architecture. | (12) |
| | b) | Compare RISC and CISC. | (8) |
| OR | | | |
| IX | a) | Explain the architecture of 8051 micro controller. | (15) |
| | b) | Explain RS 232 serial communication standard. | (5) |
| OR | | | |
| X | a) | Explain different addressing modes in 8051. | (10) |
| | b) | With suitable diagrams explain interfacing of stepper motor with micro controller. | (10) |

