

2006-CALICUT UNIVERSITY
B. TECH DEGREE EXAMINATION
MICROPROCESSOR AND MICROCONTROLLERS
(ELECTRICAL AND ELECTRONICS ENGINEERING)

TIME-3HOUR
MARKS-100

ANSWER FULL QUESTIONS

SECTION A 8*5=40 MARKS

- 1.a) what happens when MOVSW instruction is executed with D flag is set?
- b) explain the flag register of 8086.
- c) write a note on PCI.
- d) explain DMA controllers in brief.
- e) explain branch prediction logic of 80386.
- f) write a note on super scalar architecture.
- g) indicate different addressing modes of 80196.
- h) explain the CPU features of 80196 micro controller

SECTION B 4*15=60 MARKS

- 2.a) explain the architecture of 8086 processor in detail.
OR
- b) how instruction set of 8086 are classified? give examples.
- 3.a i) write the control word format for 8255.
ii) write a note on key board display interface.
OR
- b) explain all the modes of operation of programmable timer. also give timing diagrams.
- 4.a) explain memory unit of 80386 processor.
OR
- b) explain various features of pentium processors that makes its program execution very fast.
- 5.a) using block diagram explain 80196 microcontroller.
OR
- b i) how do parallel port work in 80196?
ii) explain the operation of PWM block of 80196 microcontroller.