

Time 3 Hrs

Max. Marks 100

- Note: 1) Question no. 1 is compulsory
2) Answer any four from Q.2 to Q.7
3) Draw diagram wherever necessary.

- Q.1 a) Draw EFLAG register format and write functions of control flags of 80386. 10
b) Explain how flushing problem is minimized in Pentium Processor. 10
- Q.2 a) Draw protected mode address translation mechanism in 80386 with neat flow diagram. Explain segment translation in detail. 10
b) Write instruction pairing rules and instruction issue algorithm in case of Pentium. 10
- Q.3 a) List the important features of Pentium – IV processor. 10
b) Explain PCI workstation. 10
- Q.4 a) Draw and explain data cache organization of Pentium. 10
b) Distinguish Super SPARC and Ultra SPARC processors. 10
- Q.5 a) Draw the block diagram of Itanium processor. Also explain its features. 10
b) Discuss in brief classification of pipeline processor. 10
- Q.6 a) State and explain operating modes of x86 family of processors. 10
b) Draw and explain segment descriptor. 10
- Q.7 Write short note on (Any Four) 20
a) Data formats of SPARC processor.
b) USB
c) Integer pipeline stages of Pentium processor.
d) VM 86
e) Super scalar and super pipeline processors.