

UNIT 1

1. The first microprocessor with the PMOS microprocessor was
 - a. Intel 4004
 - b. Intel 8008
 - c. Intel 80386
 - d. Intel 8086
2. 8086 microprocessor has
 - a. 16 bit address bus
 - b. 20 bit address bus
 - c. 32 bit address bus
 - d. 48 bit address bus
3. 8086 microprocessor has
 - a. 16 bit data bus
 - b. 20 bit data bus
 - c. 32 bit data bus
 - d. 48 bit data bus
4. 8086 consists of registers named:
 - a. code segment register
 - b. Stack segment register
 - c. Data segment register
 - d. all of these
5. The segment registers of 8086 are of:
 - a. 16 bits
 - b. 32 bits
 - c. 48 bits
 - d. 20 bits
6. There are active flags
 - a. 6
 - b. 9
 - c. 12
 - d. 5
7. Setting which flag puts the processor into single step mode for debugging:
 - a. TF
 - b. DF
 - c. IF
 - d. ZF
8. Which flag indicates the overflow from magnitude to the sign bit of result:
 - a. ZF
 - b. DF
 - c. SF
 - d. OF
9. What is the part of memory from which BIU fetches the instruction code bytes
 - a. CS
 - b. DI
 - c. SI
 - d. BP
10. What is the section of the memory which is reserved to store addresses & data while executing the subroutine program:
 - a. data
 - b. Stack
 - c. Code
 - d. Segment
11. Features of the 80386 microprocessor:
 - a. multitasking support
 - b. memory management
 - c. Page translation
 - d. All of the above
12. 80386 can access:
 - a. 4 GB physical memory
 - b. 8 GB physical memory
 - c. 12 GB physical memory
 - d. 16 GB physical memory
13. 80386 is a
 - a. 32 bit processor
 - b. 16 bit processor
 - c. 12 bit processor
 - d. 64 bit processor
14. Which signal ensures that the 80386 has uninterrupted control of bus system & shared resources.
 - a. READY
 - b. LOCK
 - c. Next address
 - d. HOLD

15. A high on this pin indicates that DMA controller is requesting for bus cycle:

- a. HOLD b. HLDA

16. What is the input used by wait instruction of a co processor:

- a. BUSY b. Error

17. Which register holds the temporary result after an arithmetic & logical operation.

- a. EBX b. EAX

18. Which register works as a random pointer for stack segment:

- a. ESI b. EBP

19. Which register holds the source data for string instruction:

- a. ESI b. EBP

20. Which address register points to the Task state table:

- a. TR b. GDTR

21. Which address register points to the global descriptor table:

- a. LDTR b. GDTR

22. Control registers are:

- a. CR0 b. CR1 c. CR2 d. All of the above

23. It indicates that the area accessed by TLB entry is available:

- a. W b. C

24. This bit is set by arithmetic instructions that generate a carry or borrow:

- a. PF b. CF

25. This bit is set when one task invokes another task:

- a. RF b. NT

UNIT 2:

1. The least significant 5 bits of the CR0 are called :

- a. Machine status word b. PE bits

2. Total memory space of 80386 is:

- a. 4 GB b. 1 GB

3. In real mode of the 80386 processor the linear addresses & the physical addresses are
a. same b. Different
4. What does the 80386 use to locate the base of vector table & to determine its length:
a. IDTR b. GDTR
5. In case of real mode , the interrupt vector table consists of:
a. 8 bytes b. 4 bytes
6. Which pair provides the address of the first instruction in the ISR:
a. CS:IP b. ES:DS
7. The effective CPL for executing programs in the real mode is always:
a. 0 b. 1
8. If the offset is greater than FFFFH than which fault is generated:
a. interrupt fault b. Stack fault
9. Whenever the user wants to return to real mode without turning off the power, the user can simply reset:
a. PE bit b. PG bit
10. GDTR is a:
a. 48 bit register b. 16 bit register
11. LDTR is a:
a. 48 bit register b. 16 bit register
12. IDTR is a:
a. 48 bit register b. 16 bit register
13. The segment selectors point to a structure called:
a. segment descriptor b. Segment selector
14. Task register is :
a. 16 bit selector for TSS b. 32 bit selector for TSS
15. Which method divides the programs into different module such that each module will work independently:
a. paging b. Segmentation

16. What is used to index descriptor from table of descriptor:

- a. descriptor b. Selector

17. Which bit is used to select one out of GDT or LDT:

- a. Table indicator b. Null descriptor

18. Which are the non system descriptor:

- a. code b. Data c. stack d. All of above

19. A selector which has index value zero & if it points to GDT then selector is:

- a. NULL selector b. NULL descriptor

20. Which bit allows us to get segment larger than 1 MB:

- a. PE bit b. Granularity bit

21. The TSS descriptor appears only in:

- a. GDT b. LDT

22. Privilege level rule is:

- a. $\text{MAX}(\text{RPL}, \text{CPL}) \leq \text{TSS}, \text{DPL}$ b. $\text{MAX}(\text{RPL}, \text{CPL}) \geq \text{TSS}, \text{DPL}$

23. Paging cache can be cleared by clearing:

- a. CR0 b. CR3

24. The I/O address space of 80386 in real mode is:

- a. 64 TB b. 64 KB

25. Real mode is selected if :

- a. PE=0 b. PE=1

UNIT 3:

1. The activity that is done by the microprocessor so that it can access data from memory is called as:

- a. data cycle b. Bus cycle

2. Which input provides the fundamental timing in 80386:

- a. CLK2 b. CLK1

3. The clock signal that is applied to the CLK2 input is how much times of the frequency rating of microprocessor:

- a. thrice b. Twice

4. Which state indicates that no bus cycle is currently being processed:

- a. T1 b. T2

5. Which is the process of fetching the next instruction when the present instruction is being executed.

- a. segmentation b. pipelining

6. What indicates that the addressing for the next bus cycle needs to be given when the current bus cycle is in progress:

- a. segmentation b. Pipelining

7. BE0(bar) is active for:

- a. shut down b. Halt condition

8. BE2(bar) is active for:

- a. shut down b. Halt condition

9. Which instruction puts the 80386 processor into halt state:

- a. Halt b. Shut down

10. Which instruction occurs when double fault occurs and protection fault is being found:

- a. halt b. Shut down

11. Which signal when asserted low indicates to the processor that the 80386 bus cycle is locked:

- a. LOCK(bar) b. WAIT

12. Data transfer takes place from memory due to:

- a. bus cycle b. Data cycle

13. How many CLK2 clocks do pipelining addressing method have:

- a. 4 b. 5

14. The duration of the single idle state is equal to how many CLK2 cycles:

- a. 2 b. 4

15. Which signal is used to select the physical data bus dynamically:

- a. BS16(bar) b. LOCK

16. The bus enable signal is used to select the access of:

- a. byte b. Word c. Double word d. All of these

17. The data transfer can be:

a. 8 bit b. 16 bit c. 24 bit d. All of these

18. If in a single cycle the data transfer operation is completed then the data transfer is called as:

a. aligned data transfer b. Non aligned data transfer

19. If there are the overlaps at the double word boundary then the data transfers are called as:

a. aligned data transfer b. Non aligned data transfer

20. Which signal specifies the size of each bus cycle:

a. BS16(bar) b. PG

21. Cycle 1 is without any :

a. wait state b. lock state

22. How many wait state do cycle 2 have:

a. 2 b. 1

23. During the read bus cycle the data is transferred from external device to:

a. T1 state b. Processor

24. To extend the duration of 80386 bus cycle it is necessary to insert:

a. WAIT state b. LOCK state

25. Which signal do the ready signal return back:

a. READY(bar) b. LOCK

UNIT 4

1. Which instruction is used to extract string from word or double word :

a. XBIS b. XCHG

2. Which instruction is used to scan bbits in second word or the double word:

a. BSR b. CBW

3. Which instruction is a privileged instruction:

a. HLT b. XCHG

4. Which instruction converts signed byte in AL to signed byte in AX:

a. MSW b. CBW

5. Which instruction is used to set carry flag to zero:

- a. CLD b. CLC

6. Which instruction transfers the data from port numbered by DX register to memory byte or word:

- a. CBW b. INS

7. Which flags are affected due to IMUL instruction:

- a. OF & CF b. OF & SF

8. Which interrupt occurs if second operator is a register:

- a. 6 b. 13

9. Which instruction stores the MSW in two byte register:

- a. SMSW b. SMW

10. Which instruction sets direction flag to zero:

- a. STD b. AAA

11. The function WAIT is

- a. wait until BUSY# pin is active b. Wait until BUSY# pin is inactive

12. For system call of print instruction value present in EBX register is:

- a. 0 b. 1

13. For system call of print instruction value present in EAX register is:

- a. 1 b. 0

14. In system call to store length of the message which register is used:

- a. EBX b. EDX

15. To accept single digit number the value stored in EAX register is:

- a. 1 b. 3

16. To accept single digit number the value stored in EDX register is:

- a. 2 b. 1

17. Which pair gives the address of the top stack:

- a. CS:IP b. SS:SP

18. Which pair is used as a pointer in stack:

- a. SS:BP b. DS:SI

19. Which pair is used as a destination pointer:

- a. GS:DI b. FS:DI c. Both

20. Which pair is used as a general purpose pointer for copying & data processing:

- a. ES:DI b. SS:BP

21. Which instruction is used to remove the word out of stack:

- a. PUSH b. POP

22. Flags affected due to XCHG instruction:

- a. No flags are affected b. OF

23. Which instruction allows interrupt service routines to be activated:

- a. interrupt b. ADD

24. Which directive indicates the beginning of the data segment:

- a. .CODE b. .DATA

25. Which directive helps the user to control the format of listing of an assembled program:

- a. PAGE b. .TITLE