

**MPL Oral Question Bank  
Second Year**

<b>Q. No.</b>	<b>Questions</b>
1	What do you mean by TSR? Explain with suitable interrupts
2	Explain GLOBAL and EXTERN directive.
3	How physical address in 8086 is calculated?
4	What is difference between instruction and directives?
5	Explain instructions: for example <ul style="list-style-type: none"><li>• XLAT</li><li>• CMP</li><li>• MOVSb / MOVSD</li><li>• DAA</li><li>• DIV AND IDIV</li><li>• MUL</li></ul>
6	Why it is not allowed to have two operands from memory in an instruction?
7	What benefit does the instruction queue give?
8	What are registers used to specify offset within code, data and stack segments?
9	Enlist and explain the directives used for declaring and defining the variables.
10	What does BSS stands for? What does it mean?
11	What is use of global directive in NASM program?
12	Explain NA# pin of 80386.
13	Explain BE0#- BE#3 pins of 80386.
14	What is the working of FADD instruction.
15	Why all the I/O devices are interfaced to processor through interrupt only?
16	What is default mode of processor after boot up?
17	Enlist and explain the modes of operation of 80386
18	What is the size and fields of register GDTR and IDTR?
19	Draw and explain the format of selector
20	How many selector registers are present in 80386?
21	Which condition must be satisfied for being able to access data or code (in terms of DPL, RPL and CPL)?
22	Explain CPL, RPL and DPL

- 23 Draw and explain the format of descriptor
- 24 Enlist the types of descriptor along with example of each type
- 25 What types of descriptors are stored in IDT?
- 26 What is difference between IDT and IVT?
- 27 Explain the steps carried out for fetching the Interrupt vector from IVT for instruction INT 7 and execution of ISR.
- 29 What is TSS?
- 30 What are steps to access a byte pointed by esi in MOV al, [esi] instruction?
- 31 What type of address edi contains in MOV [edi],bh?
- 32 What is addressing mode? Explain
  - Based addressing mode
  - Scaled index addressing mode
  - Implicit addressing mode
- 33 Explain what is difference between MACRO and PROCEDURE along with syntax and example
- 34 What is descriptor?
- 35 What is difference among GDT, LDT and IDT?
- 36 What will be the value stored in limit field of data segment descriptor if data segment is to be defined with size 10 bytes?
- 37 What is G bit from descriptor?
- 38 What is access right byte?
- 39 What are advantages disadvantages of cache memory?
- 40 How and when WAIT states are inserted in the machine cycle of 80386?
- 41 What does ADS#=0 indicates?
- 42 Explain bits PG, PE, ET, MP, TS, EM from CR0 register.
- 43 What is MSW?
- 44 What is debug register?
- 45 What GD bit from DR7 is used for?
- 46 What is interrupt?
- 47 How to call interrupt & procedure?
- 48 What is difference between interrupt & procedure?
- 49 Which bit of MSW causes type 7 interrupt?
- 50 Difference Between conditional & unconditional JMP?
- 51 What is system call?
- 52 32/64 bit read/write system call?

- 53 What is segmentation fault?
- 54 Enlist fundamental data types?
- 55 Which bit of MSW causes type 7 interrupt?
- 56 Explain segmentation in real & protected mode?
- 57 When to use JA/JG? What is difference between these two instructions?
- 58 Difference between opcode & operand?
- 59 Explain commands to assemble, link and execute the ALP using NASM?
- 60 Difference between jump & call instruction?
- 61 What is inline execution?
- 62 What is branched execution?
- 63 Describe structure of ALP in NASM?
- 64 What is difference between shift & rotate instruction?
- 65 What is logical address?
- 66 How to do task switch?
- 67 What is LDT? Where it is present?
- 68 What is TLB (Translation Look aside Buffer)?
- 69 Which instruction changes the content of TR?
- 70 What is use of back link field from TSS format?
- 71 How linear address is translated to physical address if paging is enabled?
- 72 What is use of D bit from PTE?
- 73 What is page fault linear address?
- 74 What are the 80387 data types?
- 75 How to convert ASCII to HEX no.
- 76 How to convert HEX to ASCII no.
- 77 What is .MODEL directive? explain TINY model
- 78 How to get vector address and set vector address?
- 79 Why segmentation fault occur in system?
- 80 What is difference between CMP and TEST instruction ?
- 81 What is NEAR and FAR call/ jump?
- 82 What is assembler?
- 83 What is a need of command line argument?

- 84 Explain EQU directive.
- 85 What are different representations for signed data type?
- 86 What is minimum size of TSS?
- 87 What are causes of task switch?
- 88 How to display hexadecimal number on screen in ALP?
- 89 How many GDTs and LDTs are present in system?
- 90 What is minimum and maximum size of segment in real and protected mode in 386?
- 91 How to represent negative no.