1. Which addressing mode is utilized when the operand is explicitly stated in the instruction itself?
a) Direct addressing mode
b) Register addressing mode
c) Indirect addressing mode
d) Immediate addressing mode

Correct answer: d) Immediate addressing mode
Explanation: In immediate addressing mode, the operand is directly specified within the instruction itself. It is useful for operations involving constants or immediate values.

2. In the context of the 8086 microprocessor, what does the term ‘segment register’ refer to?
a) Registers used for arithmetic operations
b) Registers used for accessing memory segments
c) Registers used for controlling interrupts
d) Registers used for input/output operations

Correct answer: b) Registers used for accessing memory segments
Explanation: Segment registers in the 8086 microprocessor are used to access different memory segments, allowing the processor to address a larger memory space by using segmentation.

3. Which of the following is not a flag register in the 8086 microprocessor?
a) Zero flag
b) Carry flag
c) Segment flag
d) Sign flag

Correct answer: c) Segment flag
Explanation: The segment flag is not a flag register in the 8086 microprocessor. The flag registers include the zero flag, carry flag, sign flag, and others, which hold status information about the results of arithmetic and logical operations.

4. Which instruction is used to transfer control from a program to a subroutine in 8086 assembly language?
a) JMP
b) CALL
c) RET
d) LOOP

Correct answer: b) CALL
Explanation: The CALL instruction is used to transfer control from a program to a subroutine in 8086 assembly language. It pushes the address of the instruction following the CALL onto the stack and jumps to the specified subroutine.

5. What is the purpose of the LEA instruction in 8086 assembly language?
a) Load Effective Address
b) Load Accumulator
c) Load Byte
d) Load Word

Correct answer: a) Load Effective Address
Explanation: The LEA (Load Effective Address) instruction is used to load the effective address of a memory operand into a register without actually accessing the memory location. It is often used for address calculations.

6. Which instruction is used to perform bitwise AND operation in 8086 assembly language?
a) AND
b) XOR
c) OR
d) TEST

Correct answer: a) AND
Explanation: The AND instruction is used to perform bitwise AND operation in 8086 assembly language. It performs the logical AND operation between the bits of two operands.

7. What does the mnemonic ‘MOV’ stand for in 8086 assembly language?
a) Move
b) Multiply
c) Mask
d) Modify

Correct answer: a) Move
Explanation: The mnemonic ‘MOV’ stands for Move in 8086 assembly language. It is used to copy data from one location to another.

8. Which of the following instructions is used to multiply two numbers in 8086 assembly language?
a) MUL
b) DIV
c) IMUL
d) IDIV

Correct answer: c) IMUL
Explanation: The IMUL instruction is used to multiply two numbers in 8086 assembly language. It supports signed multiplication.

9. What is the function of the REP prefix in 8086 assembly language instructions?
a) Repeat
b) Reverse
c) Rotate
d) Remove

Correct answer: a) Repeat
Explanation: The REP prefix is used to repeat certain string or block instructions in 8086 assembly language. It repeats the instruction until the specified condition is met.

10. Which of the following is not a general-purpose register in the 8086 microprocessor?
a) AX
b) BX
c) IP
d) CX

Correct answer: c) IP
Explanation: IP (Instruction Pointer) is not a general-purpose register in the 8086 microprocessor. It holds the offset address of the next instruction to be executed.