**Microprocessors and Microcontroller**

1. **Intel 8086 – Architecture, Signals and Features**
2. **Programming with Intel 8086**
3. **8086 Interfacing with Memory and Programmable Devices**
4. **Intel 8051 – Architecture and Programming**
5. **Interfacing of 8051**

**Module 1: Intel 8086 – Architecture, Signals and Features:**

1. The intel 8086 microprocessor is a processor

A. 8 bit B. 16 bit C. 32 bit D. 4 bit

ANSWER: B

2. The microprocessor can read/write 16 bit data from or to

A. memory B. I /O device C. processor D. register

ANSWER: A

3. In 8086 microprocessor , the address bus is bit wide

A. 12 bit B. 10 bit C. 16 bit D. 20 bit

ANSWER: D

4. The work of EU is

A. encoding B. decoding C. processing D. calculations

ANSWER: B

5. The 16 bit flag of 8086 microprocessor is responsible to indicate

A. the condition of result of ALU operation B. the condition of memory

C. the result of addition D. the result of subtraction

ANSWER: A

6. The CF is known as

A. carry flag B. condition flag C. common flag D. single flag

ANSWER: A

**Module 2: Programming with Intel 8086:**

7. IMUL source is a signed

A. multiplication B. addition C. subtraction D. division

ANSWER: A

8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_destination inverts each bit of destination

A. NOT B. NOR C. AND D. OR

ANSWER: A

9. The JS is called as

A. jump the signed bit B. jump single bit

C. jump simple bit D. jump signal it

ANSWER: A

10. Instruction providing both segment base and offset address are called

A. below type .B. far type C. low type D. high type

ANSWER: B

11. The conditional branch instruction specify\_\_\_\_\_\_\_\_\_\_\_\_\_ for branching

A. conditions B. instruction C. address D. memory

ANSWER: A

12. The microprocessor determines whether the specified condition exists or not by testing the

A. carry flag B. conditional flag C. common flag D. sign flag

ANSWER: B

**Module 3: 8086 Interfacing with Memory and Programmable Devices**

13. If MN/MX is low the 8086 operates in mode

A. Minimum B. Maximum C. both (A) and (B) D. medium

ANSWER: B

14. In max mode, control bus signal So, S1 and S2 are sent out in \_\_\_\_\_\_\_\_\_\_\_\_\_form

A. decoded B. encoded C. shared D. unshared

ANSWER: B

15. The \_\_\_\_\_\_\_\_\_bus controller device decodes the signals to produce the control bus signal

A. internal B. data C. external D. address

ANSWER: C

16. A\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Instruction at the end of interrupt service program takes the execution back to the interrupted program

A. forward B. return C. data D. line

ANSWER: B

17. The main concerns of the\_\_\_\_\_\_\_\_\_\_ are to define a flexible set of commands

A. memory interface B. peripheral interface

C. both (A) and (B) D. control interface

ANSWER: A

18. Primary function of memory interfacing is that the \_\_\_\_\_\_\_\_\_\_\_\_should be able to read from

and write into register

A. multiprocessor B. microprocessor C. dual Processor D. coprocessor

ANSWER: B

**Module 4: Intel 8051 – Architecture and Programming**

19. 8051 microcontrollers are manufactured by which of the following companies?

a) Atmel

b) Philips

c) Intel

d) All of the mentioned

Answer: d

20. AT89C2051 has RAM of:

a) 128 bytes

b) 256 bytes

c) 64 bytes

d) 512 bytes

Answer: a

21. 8051 series has how many 16 bit registers?

a) 2

b) 3

c) 1

d) 0

Answer: a

22. When the microcontroller executes some arithmetic operations, then the flag bits of which register are affected?

a) PSW

b) SP

c) DPTR

d) PC

Answer: a

23. How are the status of the carry, auxiliary carry and parity flag affected if the write instruction

MOV A,#9C

ADD A,#64H

a) CY=0,AC=0,P=0

b) CY=1,AC=1,P=0

c) CY=0,AC=1,P=0

d) CY=1,AC=1,P=1

Answer: b

24. How are the bits of the register PSW affected if we select Bank2 of 8051?

a) PSW.5=0 and PSW.4=1

b) PSW.2=0 and PSW.3=1

c) PSW.3=1 and PSW.4=1

d) PSW.3=0 and PSW.4=1

Answer: d

**Module 5: Interfacing of 8051**

25. Which of the ports act as the 16 bit address lines for transferring data through it?

a) PORT 0 and PORT 1

b) PORT 1 and PORT 2

c) PORT 0 and PORT 2

d) PORT 1 and PORT 3

Answer: c

26. Which devices are specifically being used for converting serial to parallel and from parallel to serial respectively?

a) timers

b) counters

c) registers

d) serial communication

Answer: c

27. What is the difference between UART and USART communication?

a) they are the names of the same particular thing, just the difference of A and S is there in it

b) one uses asynchronous means of communication and the other uses synchronous means of communication

c) One uses asynchronous means of communication and the other uses asynchronous and synchronous means of communication

d) One uses angular means of the communication and the other uses linear means of communication

Answer: c

28.The 8255 is a \_\_\_\_\_\_ chip.

a) Input/Output

b) Analog to Digital

c) Digital to analog

d) None of the mentioned

Answer: a

29. Which pins of a microcontroller are directly connected with 8255?

a) RD

b) WR

c) D0-D7

d) All of the mentioned

Answer: d

30. 8. How many pins of the 8255 can be used as the I/O ports?

a) 8

b) 16

c) 24

d) 32

Answer: c