

## Pattern of Axes

### Micro Processor

1. Bus arbitration is used for ans: controlling the bus
2. which one is the higher priority a) hold b) interrupt ans: a)
3. 2's complement of 43 010101
4. what happens when PUSH A instruction is exec....
5. INT6 pushes how many bytes on to the stack.  
4BYTE CHECK IT OUT
6. AL = 35, BL = 39  
ADD BL  
ROL AL,08  
now what are contents of AL.
7. one 8086 program to find the o/p(i.e. to find the largest of all)
8. x = 11010010 , y = 00110101  
x+y what is the result
9. what is the diff b/w RET and IRET
10. What happens when AND/TEST instruction is exec..flags.
11. What is max unsigned value in 16bit databus
12. what is max address in 16bit address bus
13. what is meant by memory mapped i/o
14. AL = 35  
SHL AL,04  
what are contents of AL
15. LIFO occurs in which memory

### Communication

1. what is amplitude modulation
2. Bandwidth of telephone line (4k)
3. IP layer uses a) packet switching b) circuit switching  
c) store and forward switching d) both a and b
4. which one is not transmission media a) optical fiber b) coaxial cable  
c) catagary 5 UTP d) none of above
5. number of address bits in IPV6 128
6. ISDN is used for digital communication
7. which layer not present in TCP
8. what is the time period of E1 carrier superframe  
ans: 2ms
9. what is the bit rate of the E1 carrier/channel

10. ATM is a) adapter b) n/w architecture layer c) conector ans: b  
11.on ADSL - Asynchronous Digital Subscriber Line  
12.on AI Networks?

### C- Questions

1. struct {  
int a;  
char b;  
char \*c;  
}mystruct;  
what is the sizeof structer.  
2.union {  
int a;  
char b : 3;  
char c : 2;  
}x;  
what is the sizeof union.  
3. what is sizeof('a')  
4. write p is pointer to constant char  
a) char const \*p;  
b) char \*const p;  
c) const \*char p;  
d) const char \*p;  
5. which one is faster compiler or interpreter  
6.sizeof is \_\_\_\_\_  
7.STACK is part of \_\_\_\_\_? ANS:-RAM  
8.TO print % ?  
9.#include includes definitions or declarations?  
Ans:-declarations.  
10.where the locals and globals are stored. Ans :- stack & heap.  
11.

\*\*\*\*\*

### Axes Technologies

1. A 2MB PCM(pulse code modulation) has  
a) 32 channels  
b) 30 voice channels & 1 signalling channel.  
c) 31 voice channels & 1 signalling channel.  
d) 32 channels out of which 30 voice channels, 1 signalling channel, & 1 Synchronizatio channel.  
Ans: (c)  
2. Time taken for 1 satellite hop in voice communication is  
a) 1/2 second b) 1 seconds c) 4 seconds d) 2 seconds  
Ans: (a)

3. Max number of satellite hops allowed in voice communication is :

a) only one b) more than one c) two hops d) four hops

Ans: (c)

4. What is the max. decimal number that can be accommodated in a byte.

a) 128 b) 256 c) 255 d) 512 Ans: (c)

5. Conditional results after execution of an instruction in a micro processor is stored in

a) register b) accumulator c) flag register d) flag register part of PSW(Program Status Word) Ans: (d)

6. Frequency at which VOICE is sampled is

a) 4 Khz b) 8 Khz c) 16 Khz d) 64 Khz Ans: (a)

7. Line of Sight is a) Straight Line b) Parabolic c)

Tx & Rx should be visible to each other d) none Ans: (c)

8. Purpose of PC(Program Counter) in a MicroProcessor is

a) To store address of TOS(Top Of Stack) b) To store address of next instruction to be executed. c) count the number of instructions.

d) to store base address of the stack. Ans: (b)

9. What action is taken when the processor under execution is

interrupted by a non-maskable interrupt?

a) Processor serves the interrupt request after completing the

execution of the current instruction. b)

Processor serves the interrupt request after completing the current task. c) Processor serves the interrupt

request immediately. d) Processor serving the interrupt request depends upon the priority of the current task under execution. Ans: (a)

10. The status of the Kernel is

a) task b) process c) not defined. d) none of the above. Ans: (b)

11 What is the nominal voltage required in subscriber loop connected to local exchange?

a) +48 volts b) -48 volts c) 230 volts d) 110 volts

12. To send a data packet using datagram , connection

will be established

a) before data transmission. b) connection is not established before data transmission. c) no connection is required. d) none of the above. Ans: (c)

13. Word alignment is a) aligning the address to the next word boundary of the machine. b) aligning to even boundary. c) aligning to word boundary. d) none of the above. Ans: (a)

14 When a 'C' function call is made, the order in which parameters passed to the function are pushed into the stack is a) left to right b) right to left c) bigger variables are moved first than the smaller variables. d) smaller variables are moved first than the bigger ones. e) none of the above. Ans: (b)

15 What is the type of signalling used between two exchanges?  
a) inband b) common channel signaling c) any of the above d) none of the above. Ans: (a)

16. Buffering is a) the process of temporarily storing the data to allow for small variation in device speeds b) a method to reduce cross talks c) storage of data within transmitting medium until the receiver is ready to receive. d) a method to reduce routing overhead. Ans: (a)

17. A protocol is a set of rules governing a time sequence of events that must take place between a) peers b) non-peers c) allocated on stack d) assigned to registers.

18. Memory allocation of variables declared in a program is a) allocated in RAM. b) allocated in ROM. c) allocated on stack. d) assigned to registers. Ans: (c)

19. A software that allows a personal computer to pretend as a computer terminal is a) terminal adapter b) bulletin board c) modem d) terminal emulation Ans: (d)

20. Find the output of the following program  
`int *p,*q;  
p=(int *)1000;`

```
q=(int *)2000;
printf("%d",(q-p));
Ans: 500
```

21. What does the statement `int(*x[])()` indicate?  
22. Which addressing mode is used in the following statements:  
(a) `MVI B,55` (b) `MOV B,A` (c) `MOV M,A`  
Ans. (a) Immediate addressing mode. (b) Register Addressing Mode  
(c) Direct addressing mode

23. RS-232C standard is used in \_\_\_\_\_. Ans. Serial I/O  
24. How are parameters passed to the main function?  
25. What does the file `stdio.h` contain?  
a) function definition b) function declaration c) both  
func. defn func. declaration.  
26. `scanf` is used for ?  
27. Memory Management in Operating Systems is done by  
a) Memory Management Unit b) Memory management software of the Operating System c) Kernel Ans: (b)  
28. What does the statement `strcat(S2,S1)` do?  
29. TCP is Connection Oriented and used in \_\_\_\_\_ layer?  
30. IP(Internet Protocol) is connectionless and used in \_\_\_\_\_ layer?  
31. For LAN Network layer is not required. Why?  
32. What is done for a Push operation?  
Ans: SP is decremented and then the value is stored.  
33. Describe the following structures as LIFO/FILO/FIFO/LILO  
(a) Stack (b) Queue

#### Network basics

-----

\* T1(US standard)  
Data rate 1.544MBPS  
No of Channels 24  
No of bits per frame 193 (8x24 + 1 Framing bit)  
Time 125uS/Sample(for 193 bits)

\* E1(European standard)  
Data rate 2.048MBPS  
No of Channels 32

\* OSI Model  
Application Layer  
Presentation Layer  
Session Layer  
Transport Layer  
Network Layer

Data Link Layer  
Physical Layer

\* TCP/IP Model  
Application Layer  
Transport Protocol(TCP/UDP/SCTP)  
Internet Protocol(IP)  
Physical Layer

\* TCP-->Connection Oriented  
Reliable  
Slow

\* UDP-->Connection less  
Unreliable  
fast

\* POT(Plain Old Telephone) works with -48V

\* Internet--> packet switching  
PSTN --> Circuit switching

\* Hamming code distance --> 5

\* In Ethernet Frame length is fixed

\* MAC() length is 6 bytes

\* In Asynchronous communication START/STOP bits r used

\* Long Distance Communication --> Satellite

\* Protocol is a set of rules used for communication  
between two peers

\* UTP-5 (Unshielded Twisted Pair)  
STP (Shielded Twisted Pair)

7. A man owns  $\frac{2}{3}$  of the market research beauro  
business and sells  $\frac{3}{4}$  of his shares for Rs. 75000.  
What is the value of Business. Ans.150000

10. From its total income, A sales company spent  
Rs.20,000 for advertising, half of the remainder on  
commissions and had Rs.6000 left. What was its total  
income?Ans.32000

18. If a salesman's average is a new order every other  
week, he will break the office record of the year.  
However, after 28 weeks, he is six orders behind  
schedule. In what proportion of the remaining weeks  
does he have to obtain a new order to break the  
record? Ans. $\frac{3}{4}$

