

9. `printf("%u",-1)`
 what is the value?
 a. -1 b. 1 c. 65336 d. --

(maxint value-1 I think, check for the answer)

10. `#define void int`
`int i=300;`
`void main(void)`
`{`
`int i=200;`
`{`
`int i=100;`
`print the value of i;`
`}`
`print the value of i`
`}`
 what is the output?

may be 100 200

11.
`int x=2;`
`x=x<<2;`
`printf("%d ",x);`

ANS=8;

12.
`int a[]={0,0X4,4,9};` /*some values are given*/
`int i=2;`
`printf("%d %d",a[i],i[a]);`

what is the value??? (may be error)

13.
 some other program is given , I can't remember it
 U can get it afterwards,
 the answer is 3 3, so U can check this in the exam. itself.
 I'll send the remaining two afterwards whenever I get them. OK !

14.

 -
 --

 MASCOT

this test contains 2 papers
 paper1=aptitude-30min-44questions
 contains 3 sections
 paper2=computer skill-30min-60questions-6sections-10questions each

 paper1

 section1

 i do not remember the q's.simple quantitative apt. q's.
 but takes more time ,do fast.

section2

1-8 q's on bus route.	a	b	c	d	e
	a	x	8	15	20
	b	6	x	9	13
	c	10	12	x	3
	d	9	1	18	x
	e	3	4	17	14

where x is starting point.a&e are first and last stations.and b,c,d are intermediate stations. fig's are no. of passengers.cost of ticket is 0.7Rs /pass.

between any successive stations. based on this few q's were given. the fig's

are not correct. q's like total no.of pass.in onward journey.

Rest of q's are

2 statements were given. u have to answer they are correct or not .littlebit

easy.

section3

simple q's from r.s agarwal_quantitative apt.

1. $1/10^{\text{power}18} - 1/10^{\text{power}20}$ value?

2.pipes-leaking-cisterns.

paper2

- ```

1.general awareness.2.
1.father of computers
2.expand HTML,DMA,FAT,LAN,WAN,FDDetc
3.intel's first micropro...a.pentium b.pentiumproetc
4.1024(dec)convert to hexa&octal
5.first micro.pro.a)8085b)8088etc
6.motorola's processor name?
7.windows_NT expand
8.simple programs on pascal&c
9.diff between 8087,8086 (which is latest vers.)
10.some basic q's on GUI.
11.q's on IBMpc
12.one program on finding factorial

```

i remember only these q's. i will ask my pals about rest of q's.i want to know when mascot is coming.they have taken 14 from here. most of them are mech.&ime.

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TISL

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I know some 25 questions.

The technical comprises of 50 questions on C,Unix and windows.

```

1.const char *
char * const

```

What is the differnce between the above tow?.

- ```

2.In Unix inter process communication take place using?.
3.What are the files in /etc directory?.
4.About i-node numbers
5.Max relaxable permissson value with out giving write

```

permission

to others?.

```

6.About ln(linking)

```

```

7.A question on until

```

```

    until (who |grep mary)

```

```

        do

```

```

        sleep(60)

```

```

        done

```

```

8.Linkig across directories?.

```

```

9.process id for kernell process

```

```

10.very first process created by kernell

```

```

11.function to repaint a window immediately?.

```

```

12.Function entry for DLL in win3.1

```

- 13.win 3.1 is a
- 14.win 3.1 supports which type of multi tasking?.
- 15.Message displayed when a window is destroyed
- 16.About fork()?
- 17.About send message and post message
- 18.Message to limit the size of window
- 19.System call executable binary file into a process
- 20.About GDI object?.
- 21.API used to hide window
- 22.Initialize contents of a dialog?.

VERIFONE

there will be 45 qstns. 15+5+5+5+5+5+5.

section: electronics:

1.a logic ckt is given and asked to identify the configuration.

ans: XOR.

2.multi vibrator with nor gates is given

ans: astable multi sqr wave opt.

3.4 stage ripple counter with delay(f/f) 10msec. How much time it takes

for a state to change. $4 \times 10 = 40$.

4.impedence of a p'lel resonant circuit at resonance:R.

5.serial to parallel conversion is done by ans:shift register.

5.if the address bus is 20bits.then the memory space is 1Mb.

6.filtering can be done with:capacitor,inductor,both,none.

7.the config that is worst effected by low CMMR

ans:Non inverting amplifier.

8.two progs are given. one starts counting from 0 to MAX and the other starts from MAX to 0. which one executes fast.may be Max to 0.Think of.it should be.

another 6 qstns are there. simple.

Networks:

1.

the fctn of datalink layer is:bit stuffing.

2.which of the following is not fctn of datalink layer: Encryption.

3.voltage levels of rs232x:+12,-12.

4.which of the following is not used for client/server.

RPC,TCP/IP,MESSAGEQs None ans:may be none.

5.

database:

1. which of the following is true.

ans:the primary key in DataBase design is very important.

2. SQL is a Non procedural query language.

3.

4

5.

compiler/algo/ds:

1.Data structure used to implement a menu: doubly linked circular linked

list.

2. some regular expression is given:WaW'.may be it is context free grammar.

3.,4,5.

os:

1.the feature of real time os is: fast context swithing.

2.os implements protection with the help of hardware(like virtual addressing in 386/286 etc).

C:

some small c progs are given asked to tell the function/errors etc.

one of the qstn(last in the paper) is an invalid statement.

finish of all these very fast and think about those others. they are simple only.

Interview:

depends on the member.(Mr.Deep if he comes asks architect of 586/486/386/286

etc. otherwise DS,OS,C,TCP/IP . they hv taken 21(18btechs+3mtechs).

ok if u hv any queries ask immediately.

ok

all the best.

chigu.

DE-Shaw Software,Hyderabad.

SECTION-A

you should write the programs for the following problems in C.

1. swapping two variables x,y without using a temporary variable.

2. a program has been given asking to find the output

ans. it is algorithm for finding G.C.D

3. write a program for reversing the given string.

4. the integers from 1 to n are stored in an array in a random

fashion. but one integer is missing. write a program to find the missing integer.

ans. idea. the sum of n natural numbers is $= n(n+1)/2$.
if we subtract the above sum from the sum of all the numbers in the array , the result is nothing but the missing number.

5. some bit type of questions has been given on pointers asking to find whether it is correct from syntax point of view. and if it is correct explain what it will do.(around 15 bits).

SECTION-B

ANSWER AS MANY AS POSSIBLE.

- 6.& 7. two programs on pre-processor directions has been given asking to find the output.
8. simple question given on pointer
a) kernighan & richie page no. 122
b) schaum series page no. 323
try to understand the pointer problems given here he asked to explain
in the interview if answer it in exam.
9. write a c program to find whether a stack is progressing in forward or reverse direction.
10. write a c program that reverses the linked list.

GUIDELINES:

the interview is very tough he is asking to do the problems in front of him. he is also giving some new problems to solve before him.

you should have a very good funda of C language.
From iit-kgp only two 2 students have been selected.

Wipro paper(System software)
July-1997

PART --A

- 1) $abcD+abcd+aBCd+aBCD$
then the simplified function is
(Capital letters are compliments of corresponding letters
A=compliment of a)

[a] a [b] ab [c] abc [d] $a(bc)^*$ [e] none
(bc)*=compliment of bc

Ans: e

2) A 12 address lines maps to the memory of

[a] 1k bytes [b] 0.5k bytes [c] 2k bytes [d] none

Ans: b

3) In a processor these are 120 instructions . Bits needed to impliment
this instructions

[a] 6 [b] 7 [c] 10 [d] none

Ans: b

4) In 8085 microprocessor READY signal does. which of the following
is incorrect statements

[a] It is input to the microprocessor
[b] It sequences the instructions

Ans : b

5) Return address will be returned by function to
[a] Pushes to the stack by call

Ans : a

6)
n=7623
{
temp=n/10;
result=temp*10+ result;
n=n/10
}

Ans : 3267

7) If $A > B$ then

$F = F(G);$

else $B > C$ then

$F = G(G);$

in this , for 75% times $A > B$ and 25% times $B > C$ then, is 10000
instructions

are there , then the ratio of F to G

[a] 7500:2500 [b] 7500:625 [c] 7500:625 if $a=b=c$ else
7500:2500

 8) In a compiler there is 36 bit for a word and to store a character 8bits are needed. IN this to store a character two words are appended .Then for storing a K characters string,

How many words are needed.

[a] $2k/9$ [b] $(2k+8)/9$ [c] $(k+8)/9$ [d] $2*(k+8)/9$ [e] none

Ans: a

9) C program code

```
int zap(int n)
{
  if(n<=1)then zap=1;
  else zap=zap(n-3)+zap(n-1);
}
then the call zap(6) gives the values of zap
[a] 8 [b] 9 [c] 6 [d] 12 [e] 15
```

Ans: b

PART-B

1) Virtual memory size depends on

[a] address lines [b] data bus
 [c] disc space [d] a & c [e] none

Ans : a

2) Critical section is

[a]
 [b] statements which are accessing shared resources

Ans : b

3) load a
 mul a
 store t1
 load b
 mul b
 store t2
 mul t2
 add t1

then the content in accumulator is

Ans : $a^{**2}+b^{**4}$

-
- 4) question (3) in old paper
 - 5) q(4) in old paper
 - 6) question (7) in old paper
 - 7) q(9) in old paper
-

Honeywell conducted a test in IIT and Interview was in their office at B'lore.

Test contained 100 multiple choice questions divided into

- a) Verbal ability (15 ques)
- b) Numerical aptitude (15)
- c) Logical and analytical ability (15)
- d) Elementary computer science (10)
- d) Programming languages (20)
- e) Operatins systems and Data structures (25)

Not sure about the number of questions.

Verbal ability questions contained 3 parts.

- a) One passage is given and U have to answer 5 questions
- b) Some words are given and their synonyms have to be written
- c)

Numerical aptitude and Logical questions were the usual stuff.

I had 4 rounds of interview.

First round (around 45 minutes) contained, questions from Real-time

Systems (my research area), operating systems and Software Engineering

Explain U'r research work.

What is a Real-Time System ?

What is the difference between Hard and Soft real-time systems ?

What is a mission critical system ?

What is the important aspect of a real-time system ?

Explain the difference between microkernel and macro kernel.

Give an example of microkernel.

Why paging is used ?

Which is the best page replacement algo and Why ?

WHat is software life cycle ?

How much time is spent usually in each phases and why ?
Which one do U want to work if selected in Honeywell ?
(I said I don't like testing)
They asked why ?
I said it is a boring job. Then they tried to analyse
the knowledge in testing.

What is testing ?
Which are the different types of testing ?
Then they explained the way they do testing. They said that they are
doing testing in requirement phase and design phase so that if any
problem comes in those phases it is not necessary to go back and
change
the requirement or design. All the test processing is automated.

Why do U want to join Honeywell ?
Ans : To get a practical feeling of Real-time systems.

Do U know C++ ?
How good are U in C and C++ ?
Rate U'rself in both C and C++. (1 - 10 marks)

Second round (around 45 minutes)

They wanted a bio-data at the time of interview. I gave the placement
office bio-data and in that one there was column 'Major subjects
studied'. Many of the questions came from those.

Explain U'r research work.
Lot of questions from it.

What is a distributed system ?
Some questions about CSP. (I kept quiet)
Which languages do U know ?
What are the differences between Pascal and C.
I said Pascal is a strongly typed language.
Then what is typing and its advantages ?
Then he asked some questions from Compiler construction and Lisp.

Which are the different computer architectures ?
What is the requirement in MIMD ?
What is the difference between RISC and CISC processors ?
Difference between loosely coupled and tightly coupled systems ?
What is an open system ?

Still a lot of questions from software engineering .
Which are the different phases in Software life cycle (asked again)
Why is analysis and testing phases very important ?
Which methodologies are U familiar with ?

Have U worked in windows ? (Yes)

What is the difference U have seen from a Do