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Sun, 30 Aug 1998 06:29:38 -0400
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To:
mksharma@cc.iitkgp.ernet.in

To: mani@bronto.iitm.ernet.in
Subject: Wipinf

Written : Mainly OS, Datastructures, C and CO .

Answers : All the answers which iam giving here may not right. These
are
just what I wrote there.

1. On Deadlock : Trivial answer, Shared Data
2. CPU Utilization:
given CPU time : 20 %
paging : 97.7%
I/O : 5.33 %

Which of the following is not likely to improve CPU Utilization:
Ans: Installing a faster CPU

3. Bubble sort : Given sequence of numbers what will be order of
sequences
after two iterations.
Ans: very trivial, but you should know what bubble
sort
does.

4. Bubble sort : how many swap operations has been done in the above
process?

5. What data structures you should use for dictionary searching and it
should be capable of doing spell check also ?
Ans: Hashing

6. Which is the best scheduling algo. (given five of them)
Ans.: Shortest Job First with Pre-emption

7. If a numbering system uses 0 , 1 and Z where Z stands for -1
what is the value of 6.25 :
$$Z01 = 1*1 + 0*2 + (-1)*4$$

Ans: You can easily find out by trial and error keep in mind
that other side of dot will proceed as 1/2, 1/4 ...

8. What is the value of 121 base 4 + 84 base 16 ?

Ans : 2130

9. What Aliases stands for?

10. What is the value of
 $ABCD + AB'C'D' + AB'C'D + AB'C'D'$?
 (Expression may not be the exact one but something similar to the above)
11. & 12. Given a C code. What is the Output ?
 Ans: Trivial, just we have to go through the code carefully.
 One of the questions is to reverse the given number.
 ie. given 3276 the pgm. will output 6723
13. One questions on CO, which is slight a lengthy one and I couldn't recollect the same.
14. Given Three trees and One sequence of alphabets, we are suppose to find which operation was performed on the tress to get that result. ie. either preorder, postorder or inorder.
 Ans: To that question, all preorder
15. When the fn. is called where the return add. is stored?
 ans. stack
16. What is the nece. for compiler to support recursion?
 ans/ stack
- There are five more questions which i could not recollect as of now and mail you later.
- bye
- krishv

Questions that are asked to me in the wip.info. interview.

1. What are the funs. of transport layer? What is TCP, UDP, their differences
2. If you undelete a file in unix or dos can you recover it? If you can how will you do it?
3. Write a pgm. to check whether given string is palindrome or not?
4. Which page replacement algo. is the best one? ie. the one which will give less page faults, assuming cache memory is not there.
4. Do you know unix internals?
5. What is TSR ? Explain in little detail? HOw it is handled?
6. How to fine the size of the int without using size of operator?
 ans. store -1 in that location so by two's complement all ones will be stored in that location. Keep right shifting it so zeros will be appened on the left. Once the location is filled with all zeros, the number of shifts gives you the size of that operator.
7. About ARP and RARP.
8. HOw parameter passing in C

9. What compiler actually does

Some more personal questions.

To: mepg9618@violet.iitm.ernet.in
Subject: Deshaw!

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. 323try 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.

THIS IS THE PAPER IN IIT KHARAGPUR

DESHAW 97

PART 1

TIME:20 MIN

* 20 QUESTIONS , EACH QUESTION CARRIES 2 MARKS

1. A SOLID ICE OF 11 X 8 X2 INCHES IS MADE INTO ROD OF DIA 4 INCH. WHAT

ANS: 3.5 INCH

ANS: 16

ANS: $(60-6) / 2 + 1 : 28$

ANS: 24 (NOT GIVEN)

ANS: 1HOUR 12 MIN.

ANS: 6000

ANS: 86

ANS: 25 MIN

ANS: 25%

10. OUT OF 100 FAMILIES IN NEIGHBOUR HOOD , 55 OWN RADIO, 75 OWN T.V

AND 25 OWN VCR. ONLY 10 FAMILIES HAVE ALLOF THESE, AND EACH VCR OWNER HAS TV . IF 25 FAMILIES HAVE THE RADIO ONLY, THE NO. OF FAMILIES HAVE ONLY TV ARE?

ANS: 30

APTITUDE: (QUESTIONS 16 T019)

KYA KYA IS AN ISLAND IN THE SOUTH PACIFI . THE INHABITANTS OF KYA KYA ALWAYS ANSWER ANY QUESTION WITH TWO SENTENCES, ONE OR WHICH IS ALWAYS TRUE AND OTHER IS ALWAYS FALSE.

1. YOU ARE WALKING ON THE ROAD AND COME TO A FORK. YOU ASK ,THE INHABITANTS
RAM.LAXMAN, AND LILA AS" WHICH ROAD WILL TAKE ME TO THE VILAGE?

RAM SAYS: I NEVER SPEAK TO STRANGERS. IAM NEW TO THIS PLACE
LAXMAN SAYS: IAM MARRIED TO.LILA. TAKE THE LEFT ROAD
LILA SAYS: IAM MARRIED TO RAM. HE IS NOT NEW TO THIS PLACE

ANS: LEFT ROAD TAKE YU TO THE VILLAGE

2. YOU FIND THAT YOUR BOAT IS STOLLEN. U QUESTIONED THREE INHABITANTS OT ISLANDS AND THEIR REPLIES ARE

JOHN : I DIDNOT DO IT. MATHEW DIDNOT DO IT
MATHEW : I DIDNOT DO IT. KRISHNA DIDNOT DO IT
KRISHNA: I DID NOT DO IT; I DONOT KNOW WHO DID IT

ANS: MATHEW STOLEN THE BOAT

3. YOU WANT TO SPEAK TO THE CHIEF OF VILLAGE , U ASK THREE FELLOWS AMAR BOBBY, CHARLES AND BOBBY IS WEARING RED SHIRT

AMAR : IAM NOT BOBBY`S SON ; THE CHIEF WEARS RED SHIRT
BOBBY : IAM AMARS FATHER ; CHARLES IS THE CHIEF
CHARLES : THE CHIEF IS ONE AMONG US; IAM THE CHIEF

ANS: BOBBY IS THE CHIEF

4. THERE IS ONLY OPNE POLOT IN THE VILLAGE(ISLAND). YOU INTERVIEWED THREEEM MAN
KOISK ,LORRY AND MISHRA
U ALSO NOTICE THAT KOISK IS WEARING CAP.

M SAYS : LARRY IS FATHER IN THE PILOT .LARRY IS NOT THE PRIESTS SON
KOISK : IAM THE PRIEST ON THEIS ISLAND ONLY PRISTS CAN WEAR THE CAPS
LARRY : IAM THE PRIEST SON . KOISK IS NOT THE PREST

ANS : KOISK IS THE PILOT

THIS PAPER HAS GIVEN IN IIT DELHI , SO GO THROUGH THIS IT WILL GIVE ROUGH IDEA;

```
1.  typedef struct{
        char *;
        nodeptr next;
    } * nodeptr;
```

what does nodeptr stand for?

2. supposing thaty each integer occupies 4 bytes and each charactrer 1 byte , what is the output of the following programme?

```
#include<stdio.h>
main()
{
    int a[] = { 1,2,3,4,5,6,7};
    char c[] = {' a','x','h','o','k'};
    printf("%d\t %d ", (&a[3]-&a[0]), (&c[3]-&c[0]));
}
ans : 3 3
```

3. what is the output of the program?

```
#include<stdio.h>
main()
{
    struct s1 {int i; };
    struct s2 {int i; };
    struct s1 st1;
    struct s2 st2;
    st1.i =5;
    st2 = st1;
    printf(" %d " , st2.i);
}
```

ans: nothing (error)

expl: diff struct variables should not assigned using "=" operator.

4.what is the output of the program?

```
#include<stdio.h>
main()
{
    int i,j;
    int mat[3][3] = {1,2,3,4,5,6,7,8,9};
    for (i=2;i>=0;i--)
        for ( j=2;j>=0;j--)
            printf("%d" , (*(mat+j)+i));
}
```

ans : 9 6 3 8 5 2 7 4 1

5.

```
fun(n);
}
int fun( int n)
{
    int i;
    for(i=0;i<=n;i++)
```

```

fun(n-i);
printf(" well done");

}
    howmany times is the printf statement executed for n=10?

```

ans: zero

expl: Before reaching to printf statement it will goes to infinite loop.

6.what is the output of the program?

```

main()
{
struct emp{
    char emp[];
    int empno;
    float sal;
};
struct emp member = { "TIGER"};
printf(" %d %f", member.empno,member.sal);

```

ans: error. In struct variable emp[], we have to give array size.

If array size given

ans is 0, 0.00

7. output of the program?

```

    # define infiniteloop while(1)
main()
{
    infiniteloop;
    printf("DONE");
}

```

ans: none

expl: infiniteloop in main ends with ";" . so loop will not reach end; and the DONE also will not print.

8. output of the program?

```

main()
{
int a=2, b=3;
printf(" %d ", a++b);
}

```

ans:5

expl: here it evaluates as a++ + b.

9. output of the program?

```

#define prn(a) printf("%d",a)
#define print(a,b,c) prn(a), prn(b), prn(c)
#define max(a,b) (a<b)? b:a

```

```

main()

```

```

{
int x=1, y=2;
print(max(x++,y),x,y);
print(max(x++,y),x,y);
}

```

ans: 3 4 2

10. which of the following is the correct declaration for the function main() ?

ans: main(int , char *[])

11. if ptr is defined as

```

int *ptr[][100];
which of the following correctly allocates memory for ptr?

```

ans: ptr = (int *) (malloc(100* sizeof(int)));

FEW MORE PROGRAMS HERE BUT NOT AVAILABLE:

- 1) ONE RECTANGULAR PLATE WITH LENGTH 8INCHES,BREADTH 11 INCHES AND 2 INCHES THICKNESS IS THERE.WHAT IS THE LENGTH OF THE CIRCULAR ROD WITH DIAMETER 8 INCHES AND EQUAL TO VOLUME OF RECTANGULAR PLATE?
ANS: 3.5INCHES
- 2) WHAT IS THE NUMBER OF ZEROS AT THE END OF THE PRODUCT OF THE NUMBERS FROM 1 TO 100
- 3) in some game 139 members have participated every time one fellow will get bye what is the number of matches to choose the champion to be held?
ans: 138
- 4) one fast typist type some matter in 2hr and another slow typist type the same matter in 3hr. if both do combinely in how much time they will finish.
ans: 1hr 12min
- 5) in 8*8 chess board what is the total number of squares refer odel
ans:204
- 6) falling height is proportional to square of the time. one object falls 64cm in 2sec than in 6sec from how much height the object will fall.
- 7) gavaskar average in first 50 innings was 50 . after the 51st innings his average was 51 how many runs he made in the 51st innings
- 8)2 oranges,3 bananas and 4 apples cost Rs.15 . 3 ornages 2 bananas 1 apple costs Rs 10. what is the cost of 3 oranges, 3 bananas and 3 apples ANs Rs 15.
- 9)in 80 coins one coin is counterfiet what is minimum number of weighings to find out counterfiet coin
- 10)in a company 30% are supervisors and 40% employees are male if 60% of supervisors are male. what is the probability

- that a randomly choosen employee is a male or female?
- 11)statement: all green are blue are blue, all blue are white
conclusion:
I) some blue are green II) some white are green
III)some green are not white IV) all white are blue
a) he has given four choices like gre type
- 12)all teachers are students. some students are girls.
this type of questions are there.
we cant able to reproduce them.:wq

EASI -96

NOW I AM SENDING EASI-TECH-96 PAPER
FIRST PRIORITY FOR --F E M & C++

You should prepare one FEM project work
and mention it in your BIODATA as your present work.Then
they will definitely call for interview even you perform
worstly in written test.

One more thing is this year they have big FORD project.
So priority is there for mechanicals.

I WILL SEND REMAINING PAPERS BY POST.

OOOOOKKKKKK!

EASI-TECH(96)

WRITE THE OUTPUT FOR FOLLOWING PROGRAMS.

- 1) printf("%d%x\n",ox2,12);
- 2) int a=10;
int b=20;
a=a^b;
b=a^b;
a=a^b;
printf("%d%d\n",a,b);
- 3)enum
{ELLIPSE,
TRIANGLE,
RECTANGLE,
SQUARE=100,
CIRCLE=5
}
printf{"%d%d%d%d\n", TRIANGLE-RECTANGLE, SQUARE*CIRCLE-RECTANGLE};
- 4) define the following...
a) pointer to a integer
b) pointer to a char
c) function pointer returning a pointer integer.
- 5) void a(void);
main()
{
a();
}
void a(void)
{
char a="HELLOW";
char *b="HELLOW";
char c[10]="HELLOW";
printf("%s%s%s\n",a,b,c);
printf("%d%d%d\n",sizeof(a),sizeof(b),sizeof(c));
}

```

6)  int a=15;
    int b=16;
    printf("%d %d \n",a&b,a/b);      (bitwise operators)
7)  int a[5],*p;
    for(p=a;p<&a[5];p++)
    {
        *p=p-a;
        printf("%d\n",*p);
    }
8)  sscanf("xyz abc ABC 345" "%*[a-z A-Z]lf",&a);
    printf("lf",a);
9)  Not clear
    fprintf(- - - - -
10) main()
    {
        int i=10;
        printf("%d",i);
        {
            int i=20;
            printf("%d",i);
        }
        printf("%d",i);
    }
11) struct class
    {
        int i;
        float a;
        string[12];
    }
    sizeof(class)=?
12)  int *p;
    i=10;
    p=i;
    printf("%d",*p);
13)  fact(5)
    int n;
    fact(n)
    {
        sum=n*fact(n-1);
    }

```

NEXT FINITE ELEMENT ANALYSIS QUESTIONS

1)

NAME THE EQUATION AND EXPLAIN THE TERMS

A) $M/I = F/Y = E/R$.

B) $m\ddot{x} + c\dot{x} + kx = F(t)$ ans: sdof mass-spring-dashpot equn.

2)

WHAT ARE THE DIFF. TYPES OF FINITE ELEMENTS.

3)

WHAT IS THE SIZE OF STIFFNESS MATRIX FOR A 4 NODDED SHELL ELEMENT IN 3-D SPACE.

4)

HOW MANY NODES ARE THERE FOR A BEAM ELEMENT ? WHY?

5)

WRITE STIFFNESS MATRIX OF TRUSS ELEMENT.

6) WHAT ARE PLANE STRESS AND PLANE STRAIN ELEMENTS

7) WHAT IS MEANT BY STRESS SMOOTHENING

8) WHAT IS GAUSS POINT

9) WHAT ARE CO AND C1 PROBLEMS

[OK 13Q IN C AND 9Q IN FEM]
THIS IS ORIGINAL FULL WIDTH PAPER
SSSSSSsUUUu

yours,
murthy.

- 1) YOU SHOULD LEARN POINTERS (they may ask in I.W)
- 2) ****SHOULD LEARN C++ (this is very very IMP, Based on this only I got job. One more thing is CLASS, INHERATENCI&POLYMORPHISM is sufficient)
- 3) YOU SHOULD PREPARE ONE FEM PROJECT AND TELL THEM THAT AS YOUR OWN WORK (This will increase chance to 99%)

EASI-TECH
WRITTEN TEST PATTERN

1] C TEST 10Q 20MINUITS
2] F E M TEST 19Q 20MINUITS
3] APTITUDE TEST 15Q 20MINUITS

F E M TEST

- 1) WHO USED THE TERM FINITE ELEMENT FOR THE FIRST TIME?
 - a)
 - b)
 - c) CLOUGH
- 2) DERIVE THE JACOBIEN |J| FOR BEAM ELEMENT WITH STRAIN ENERGY?
(ANS: PROMLEM IS NOT CORRECT PLEASE DO NOT ATTEMPT)
- 3) FOR AN ELEMENT $\sigma_{Ni}=1$, WHICH TYPE OF ELEMENT IT IS?
 - a)
 - b) NATURAL CO-ORDINATE
(ANS 100% CORRECT)
- 4) TIMOSHENKO BEAM ELEMENT THEORY TO CONSIDER -- -- -- ?
 - a)
 - b)
 - c) SHEAR DEFORMATION
- 5) SHEAR LOCKING -- -- -- ?
(ANS IS VERY STIFF 'K')
- 6) MEMBRANE LOCKING
(ANS IS ARCH ELEMENT)
- 7) $Ex(\epsilon_{x}) = dU/dX$, $Ey = dV/dY$, $r(X, Y) = ?$ ($\gamma(x, y) = ?$)
(ANS IS $dU/dY + dV/dX$)
- 8) $K = \int B(TRANSPOSE) * D * B$ FOR LARGE DEFORMATION WHICH MATRIX WILL GET EFFECTED?
(ANS IS D matrix) 100% correct
- 9) FOR PLANE STRAIN $f(Ex, Ey, Ez, r(x, y))$ -- --
(ANS IS $Ez=0$)
- 10) SERENDIPITY ELEMENT IS
(ANS 8 NODDED ELEMENT)
(The element which is having nodes only on boundary is called SERENDIPITY element)
- 11) IF THE ROTATION OF ELEMENT AND THE DISPLACEMENT ABOUT N-A IS SAME THEN THE ORDER OF CONTINUITY
(ANS IS C1)
- 12) FRONTAL THEORY IS APPLIED FOR
(Please refer any fem book)
- 13) MINDLINS THEORY IS APPLIED FOR
c) this is the answer (Both Co&C1 problems)
- 14) $X = \sigma_{Ni} * \xi_i$, $U = \sigma_{Ni} * u_i$ WHICH TYPE OF ELEMENT
(Refer book)

- 15) BEAM SUBJECTED TO UDL FIND THE MOMENTS AT THE
2 NODES
- 16) $\int B(\text{Transpose}) * \sigma (\text{here } \sigma \text{ means stress}) * dV$
REPRESENTS?
(ANS IS INTERNAL LOAD VECTOR)
- 17) $\int \epsilon T(\text{epsilon transpose}) * \sigma * dV$
P=strain displacement vector
Q=stress-strain deformation
Find [K]
(ANS [K]=[P]T(p transpose)*[Q]*[P])
- 18)
- 19)

REMEMBER ORDER MAY NOT BE CORRECT

APTITUDE TEST

- 1) $33 \frac{1}{3}$ of 101 + 296 is
(ans 1200) check
- 2) $0.625 = ?$ (ans $27/40$)
- 3) One ship goes along the stream direction 28 km and in opposite direction 13 km in 5 hrs for each direction. What is the velocity of stream?
(ans 1.5 kmph)
- 4) Cubic root of 3375=?
(ans 15)
- 5) 2020201-565656=?
(ans 1454545)
- 6) CHAIRS PROBLEM
5 chairs=9 tables, 12 tables = 7 stools like that--
(ans is 80Rs)
- 7) One clock rings 7 O'clock in 7 sec. In how many seconds it will ring 10 O'clock.
(ans 10.5 sec)
- 8) One watch is showing 30 past 3. What is the angle between minutes & hours hand?
(ans 75 degrees)
- 9) The average of 4 consecutive even numbers is 27. What is the largest number?
(ans 30)
- 10) 25 stations, 24 stations are in between--
how many tickets should be required.
(ans $25*24=600$)
- 11) One ball was dropped from 8ft height and every time it goes half of the height. How much distance it will travel before coming to rest.
(ans 24 approximately)
- 12) Two trains are travelling at equilateral. Train A is travelling in the direction of earth's spin. Other train B is travelling in opposite direction of earth's spin. Which train's wheels will wear first? and why?
(ans TRAIN B .Because of less centrifugal force.)

OK HARI 3 MORE QUES ARE THERE. I HOPE YOU CAN SOLVE EASILY.
NOW I have only 3 C ques. I am sending them in immediate mail. Any when I will try to send remaining 7 C ques before 20th.

C QUESTIONS:WHAT IS THE OUT PUT FOR FOLLOWING PROGRAMMS

1)main()

```
{
char a[2];
*a[0]=7;
*a[1]=5;
printf("%d",&a[1]-a)
```

ANS:

ans may be 1.(illegal initialization)

2)

```
#include<stdio.h>
main(){
char a[]="hellow";
char *b="hellow";
char c[5]="hellow";
printf("%s %s %s ",a,b,c);
printf(" ",sizeof(a),sizeof(b),sizeof(c));
}
(ans is      hellow,hellow,hellow
           6,2,5   )
```

3)

```
#include<stdio.h>
main()

float value=10.00;
printf("%g %0.2g %0.4g %f",value,value,value,value)
}
(ans is 10,10,10,10.000000)
```

4)

```
#include<stdio.h>
void function1;
int i-value=100;
main()
{
i-value=50;
function1;
printf("i-value in the function=",i-value);
printf("i-value after the function=",i-value);
}
printf("i-value at the end of main=",i-value);
function1()
i-value=25;
```

THIS IS ROUGH IDEA OF THE PROGRAM

ANS ARE

1)i-value in the function=25;
2)i-value after the function=50;
3)i-value at the end of the main=100;

5)

```
main()
{
func(int n);
{
switch(n)
case1:
m=2;
```

```

        break;
case2:
    m=5;
        break;
case3:
    m=7;
        break;
default:
    m=0;
}
THIS IS ROUGH IDEA:
    (ANS:Out put is m=0)

```

REMAINING 5 PROGRAMS SOME WHAT LARGE AND COMPLICATED.ANY WHEY
I WILL SEND REMAINING PROGRAMS BEFORE 20th.

(for interview)Prove some of the angles in a triangle are 180.Angle in
a
half circle is 90.How will you measure hight of building when you are
at
the top of the building and if you have stone with you.
Best of luck

Sekhar

GSSL

I Test : General Intelligence

II test : Technical test

III test : C-language

I Test

Some of the questions what I have Iam sending.

1. 5,5,,13,13,21,21 Ans: 29

2.0,7,26,63,124, Ans: 215 i.e.n**3-1 rule following

3. 1,3,5,7, Ans: 9 '1' is not a prime number

4. If a person walks at 4/5th of his usual spee he reaches 40min late.
If
he walks athis usual speed how much time does he travels.

Ans:160min or 2hr 40min

5. Two trains A&B start at opposite points 120km at 60kmph. A fly
starting along with train A at 120kmph reaches B then returns back to
touch and continue. By the time two trains meet howmuch distance the fly
would have travelled?

Ans : By 1hour both trains meet, so the distance travel by fly in 1hr
is
120km.

6.In a class 80% have passed english,70% passed Hindi 10% didnt passed
either. If 144 students passed both. What is the total strength of the
class.

Ans: 240

. Find the least number when divided by 7 gives the remainder 6, when divided by 6 gives remainder 5, when divided by 5 gives remainder 4 and so on....

Ans: 419

8. If a man stands in front of sun what is the first letter of the direction which is left to him:

Ans: North(N)

9. A square is to circle what is cube to

Ans: sphere

10. Synonyms

i) Joy = gay

ii) Inert = Inactive

11. One word will be given find oddman out: Ans: sickle like that

a) sow b) cut c) sickle d) sickle

12. If I bought a cycle before 2 days of my birthday and I broke it after 3 days of my birthday the day I broke is Mar 2, 1956? Answer following logical questions?

i) when is his birthday?

Ans: April, 28 (due to leap year i.e. 1956) but do not keep answer blindly we just think before choosing answer I am just giving idea of question

13.

Monday
Aug 25, 96

Mr A,

You forgot your umbrella during the party on last Friday. I expected you to collect it on your visit on Wednesday, I plan to leave on this Friday.

Questions: when A missed umbrella?

When A is supposed to collect it?

When K leaves?

Hint: These dates i.e. Aug 25 is not exactly given in test, but I am giving feel of that question. If you solve this question you can solve it easily in exam.

14. What is my father's son's son to my son?

Ans: cousin brother

15. On cutting which solid parabola would be generated Ans: cone

16. Euler's formula: Ans: $F + V - E = 2$;

F = faces; V = vertices; E = number of edges

17. Newton Rapson method is to find Ans:to find the root of $f(x) = 0$;

18. How many tangents can be dran within three circles if they donot lie within each other

Ans : 12 But this answer is not there I kept 8 as answer

19. In language the fortran which is true. A) fortran uses call by value

20. When a program is compiled what it produces

Ans:source code to object code

21. In the following venn diagram shaded region is represented by some question like that I can't draw figure here thats why Iam sendinganswer only

Ans: $(B-A)'$ i.e. $(B-A)$ whole dash

22. $xy-x+2y = 6$ equation is shifted to form equation $xy=c$ what is c?

Ans : 4

23.When x is real what is the least value of $(x^2-6x+5)/(x^2+2x+1)$

Ans:-1/3

24.When an object like cube or sphere is seen along x,y,z,axes we get the same.Apart from these suggest another which has similar characteristics?

Ans:you have to draw the figure Ans: is triangular prism you draw triangular prism.

25. When an object is seen from front side we can see two concentric squares and topview also without any hidden lines. Draw the side view.

Ans: I know ans but I canot draw.

26. Convert 251 decimal to base 8(i.e. octal)?

Ans: similar question but for this question answer is 373

27. How much information can be solved in 1 byte of a IBM pc compatible?

Ans: 256

28.What is the language used for Artificial Intelligence Ans: lisp

29. Swap two variables without using temporary variable

Ans: $a = a+b;$
 $b = a-b;$
 $a = a-b;$

30.Which is not the operating system ?Ans: BIOS

31. What is the optimum number of operations for $2*(x^3)+3*(x^2)+5*x+5$?

Ans: three multiplications, three additions.

32. $A \Rightarrow B$ means

Ans: if A is true B has to be true

33. If A is not invertible and $BA = I$ is not possible

Ans: Determinant is Zero.

34. What is FREE BODY Diagram

Ans: Used for analysing FEM.

35. A die is thrown twice what is the probability that you get same number

Ans: $1/36$.

=====

HCL

Paper Model:

Section I: computer awareness (i.e. general things about computer)
Q.15

-ve marks: $1/4$

Section II: Simple C- language Q. 15 & -ve marks:
 $-1/4$

Section III: On pointers & structures
and C++, JAVA (only 1 on this) Q.10 each question $\rightarrow 2$
marks

-ve marks: -1
Section IV: Analytical Q.20 each question $\rightarrow 2$
marks.

-ve marks: $-1/4$

Murthy from each section I am giving one or two questions also because for checking whether the same paper or not.

And for doubtful answers also I am writing questions but not writing answers for these questions.

Section-

I

1). Piggy backing is a technique for

a) Flow control b) sequence c) Acknowledgement d) retransmission

ans: c piggy backing

2). The layer in the OST model handles terminal emulation

a) session b) application c) presentation d) transport

ans: b application

3) ans: a odd numbers of errors

4)Q. In signed magnitude notation what is the minimum value that can be represented with 8 bits

a) -128 b) -255 c) -127 d) 0

5) c 20

6) a 120

7) b synchronise the access

8) a system call

9) b the operating system

10) a 177333

11) d used as a network layer protocol in network and windows system

12) b has to be unique in the sub network

13)Q. there is an employee table with key fields as employee no. data in every n'th row are needed for a simple following queries will get required results.

a) select A employee no. from employee A, where exists from employee B where A employee no. >= B employee no. having (count(*) mod n)=0

b) select employee no. from employee A, employee B where A employee no. >= B employee no. group by employee no. having (count(*) mod n=0)

c) both a & b

d) none of the above

14)Q. type duplicates of a row in a table customer with non uniform key field customer no. you can see

a) delete from customer where customer no. exists

(select distinct customer no. from customer having count)

b) delete customer a where customer no. in

(select customer b where customer no. equal to b customer no.) and a rowid >

b rowid

c) delete customer a where customer no. in

(select customer no. from customer a, customer b)

d) none of the above

15) c Volatile modifier

----- Section I over with 15 quetions -----

SECTION-II

Section II is not covered completly But it is very very easy. You can do it very easely.

1) ans: recursion

2) long int size

a) 4 bytes b) 2 bytes c) compiler dependent d) 8 bytes

ans: compiler dependent

note: order of a,b,c,d are doubt but answer is correct.

3) x=2,y=6,z=6

x=y==z;

printf("%d",x) ?

4) if(x>2)?3:4

5)

6)

7) ans: c 6 (quetion on enum)

8) ----

--

14) c : class A,B and C can have member functions with same name.

15) ans: d none of the above

SECTION-III

1) ans: b It does not work when rp is the last element in the linked list

2) ans: a always

3) ans: b 13

4) ans: b 16

5) ans: d 55,55

6) ans: c 5,10,10,3

- 7) ---
- 8) ans:d 4
- 9) ans: c 5
- 10)ans: c semicolon missing

SECTION-IV

following are not in order:

2. $M > D > Y$ ans: (a)
6. 10 in 4 seconds,
? in 6 minutes $= 10 \times 6 \times 60 / 4 = 900$ ans: (a)
7. $a=2, b=4, c=5$
 $(a+b)/c - c/(a+b) = 11/30$ (ans).
8. $100(1000000000+1000000000)/10000 = 2 \times 10000000$ (ans).
9. what does the hexanumber E78 in radix 7.
(a) 12455 (b) 14153 (c) 14256 (d) 13541 (e) 131112 ans: (d)
10. Q is not equal to zero and $k = (Q \times n - s)/2$ find n ?
(a) $(2 \times k + s)/Q$ (b) $(2 \times s \times k)/Q$ (c) $(2 \times k - s)/Q$
(d) $(2 \times k + s \times Q)/Q$ (e) $(k + s)/Q$

(from GRE book page no:411)

data:

A causes B or C, but not both
F occurs only if B occurs
D occurs if B or C occurs
E occurs only if C occurs
J occurs only if E or F occurs
D causes G,H or both
H occurs if E occurs
G occurs if F occurs

NOTE: check following answers.

11. If A occurs which of the following must occurs

I. F & G
II. E and H
III. D

- (a) I only (b) II only (c) III only (d) I, II, & III
(e) I & II (or) II & III but not both ans: (e)

12. If B occurs which must occur

(a) D (b) D and G (c) G and H (d) F and G (e) J ans: (a)

13. If J occurs which must have occurred

(a) E (b) either B or C (c) both E & F (d) B (e) both B & C
ans: (b)

14. which may occur as a result of cause not mentioned

(1) D (2) A (3) F

(a) 1 only (b) 2 only (c) 1 & 2 (d) 2 & 3 (e) 1,2,3 ans: (c)

15. E occurs which one cannot occur

(a) A (b) F (c) D (d) C (e) J ans: (b)

11 to 15:- ----- e , a , b , c , b -----

Below are in order:

16. to 20. answers:

e
a
c
a
e

----- over -----

BEST OF LUCK

In written test in each section you have to get minimum marks i.e you have to pass in each section. There will be questions from C, C++, JAVA. about 10 questions in C++ in the written test.

INTERVIEW: I will send interview questions tomorrow early morning.

ok

yours lovingly
srihari.K

=====

HUGHES

> > (A) Aptitude : 25 Qns, 20 Minutes
> >
> > 1. 2 x 4 analytical GRE type qns
> > 2. 2-3 Reasoning qns (GRE type)
> > 3. Probability of getting a sum of 7 when two dices are thrown together
> > 4. Rest quantitative questions
> >
> > (B) Technical: 50 Qns, 45 Minutes
> >
> > 1. 3 qns on operating systems. 1 qn on dijkstra algorithm
> >
> > 2. Using which pin it's possible to address 16 bit addresses even though there
> > are only 8 address bits in 8085? Ans: ALE
> > 3. Voltage gain for an amplifier is 100 while it is operating at 10 volts
> >
> > What is the O/P voltage when i/p is 1 volt
> > 4. Quality factor indicates a) Quality of inductor b) quality of capacitor
> > c) both
> > 5. Qns related to bridges, routers and generators, which OSI layer they
> > correspond to. (Refer to Stevens 4th chapter)
> > 6. OPAMP's I/P current, O/p current and CMRR is given, what is the voltage
> > gain
> > 7. 2-3 qns on scope of static variables in C. Qn to view o/p of a C static
> > var
> > 8. Qn to print a value of a pointer
> > 9. resistance increases with temperature in a) Metal b) semiconductor
> > 10. A qn to find the physical address from a given virtual address, virtual
> > to physical address table was provided
> > 11. 16 bit mantissa and 8 bit exponent can present what maximum value?
> > 12. 4 bit window size in sliding window protocol, how many acknowledgements
> > can be held?
> > 13. Security functionality is provided by which layer of OSI
> > 14. Frequency spectrums for AM, FM and PM (figure given, u'veto tell which
h

```

> > Kind of modulation it belongs to)
> > 15. Among AM and FM which is better and why?
> > 16.LASt stage of TTL NAND gate is called: Ans: Totem Pole
Amplifier
> > 17. SR to JK flip flop conversion. Ans: S=JQ', R=KQ
> > 18. LSB of a shift register is connected to its MSB, what is
formed: Ans
:
> > RING Counter
> > 19. 2-3 Qns based on Demorgan's laws (identities: (A+b)' = A'b',
etc)
> > 20. 2 qns on Logic gates (O/p of logic gates)
> > 21. Diff in IRET and RET statements of 8086
> > 22. How many address bytes are required to address an array of
memory chi
ps
> > (4 * 6), each chip having 4 memory bits and 8k registers.
> > 23. Diff. in memory mapped and I/P O/P mapped Input/Output (Refer
a book
on Microprocessor)
> > 24. Qn on pipeline architecture
> > 25 QN on LAPB protocol
> >
> >
>
=====
==

```

***** VERY VERY IMPORTANT TIPS *****

Interview -tips

- ```

1)You should do some rough work immediately
adjacent to the problem(Aptitede)
2)You should write the explanatory notes
adjacent to the C program.

```

INTERVIEW AIM:

- ```

1)Project should be on FEM.
2)You have to explain project clearly
3)Don't tell "Iam expert in FEM or in C"
Other wise they will ask more typical Ques.
4)You tell "I know C++ & C . I am learning C++
simultaneously with C."
Q1)TELL ABOUT YOUR WORK (means project work)
Q2)TELL ABOUT YOUR FAMILY
Ans: Sir,I came from a family which gives higher
priority to education.We are two.Because of
my parents active guidance we are pursuing
higher studies.I sister studied Msc and she
got married.

```

I studied B.tech in N.U

10 in- - - -

INTER in - - - -

Q3)WHY YOU ARE COMING TO SOFT WARE?

ANS:Well sir,

What I have learned all these days definitely

increased my technical skills. But at the same time also increased my ANALYTICAL, PROUBLE SHOOTING & PROBLEM SOLVING skills.

What ever may be the technical background , above skills are necessary for S-W.

Rapid growth, frequent updating & Attractive compensation pay packages.

Q4) WHAT IS YOUR AMBITION?

ANS) Sir , I would like to become a person who is someone in SOFT WARE.

Q5) WHERE DO YOU LIKE TO SEE AFTER 5 YEARS?

ANS: Sir

One year from now I would like to become a good soft ware

expert.

Two years from now I would like to become a person who handles team work (i.e project leader)

Five years from now I have to handle more than one project

at a time.

Q6) WHY THIS COLLEGE?

Sir, from the very first begining I have had special carving (interest) to pursue (get) my higher studies from any reputed institution. I hope I have succeeded.

Q7) YOUR +POINTS

ANS: I am a team person (you should mention as captain of cricket) I can handle problems as they come

Q8) YOUR -POINTS

Sir I am a bit over confident (or emotional) and I believe people in first incident.

Q9) IF YOU CAN'T BE SELECTED TO THIS JOB , WHAT CAN YOU DO?

ANS:

Sir I am confident that I should definitely get job in your organization. If that worst case will happen I will try to rectify my errors and once again I will try for your organization.

Even then if I failed , I will search for another organization which is suitable for my potential.

Q10) WHY THIS COMPANY?

ANS:

Sir I am looking in the company for the following things.

1) Which is a giant in S-W.

2) Which is well reputed organization.

3) Which is having non-inert environment

I hope I will find all the above things in your organization.

OOOOOOOOOOK!

THESE ARE MOST FREQUENT INTERVIEW QUESTIONS.

YOU SHOULD PREPARE WELL AND LEAVE THE RESULT TO GOD.

SSSSSSSSSEU!

yours,
murthy.

=====

TECHNICAL TEST (MASCOT)

Total 6 sections.
1) Computer Fundamentals

- 2) Algorithms
- 3) Hardware
- 4) Software
- 5) General Awareness
- 6) Languages

* All together 60 questions with each section containing 10 questions.
 * All are multiple choice questions

1. One Nibble = ?
2. Hexadecimal and Octal representation of 1024 ?
3. What a compiler does ?
4. DOS ? (whether Graphical interface or Character interface and two more choices are given)
5. CPU - abbreviation
6. Fortran used as (Ans : Scientific Language)
7. ASCII character set ? (total number)
8. Windows NT- What NT stands for?
9. Which is not an input device ? (keyboard, Disk, Mouse, Lightpen)
10. Which is not a pointing device ? (mouse, Joy stick, lightpen none)
11. Microsoft Chief ?
12. 4GL ? (Fortran, SQL, ADA,)
13. Father of Computers?
14. Which of them is Object Oriented Language.?
15. Power PC is the product of ? (Microsoft, IBM, Apple, Motorola, Intel)
(A combination of any correct 3 companies)
16. Latest processor used ? (Pentium, Power PC, Pentium pro, none)
17. MS Word is ?
18. First Super Computer built in India. (Ans : param)
19. Which of the following companies donot manufacture chips?
(Microsoft, Motorola, Intel, HP)
20. LAN - abbreviation
21. WAN - abbreviation
22. Modem is ? (related to electrical hardware.- Like Modulator & demodulator)
23. FDD - abbreviation (floppy disk drive)
24. BIT - abbreviation
25. Information is ? (message, data, processed data, none)
26. Which is not networking ? (internet, ethernet, arcnet, none)
27. One Gigabyte = ? (2 power 30 , 2 power 20 , 2 power 10 none)
28. Which of the following is not RDBMS ? (sybase, SQL, Access, none)_
29. Oracle is ? (Ans : Relational Data Base Management System)
30. In Oracle, Table means (Ans : Collection of records)
31. DMA - abbreviation (Direct Memory Access, Discrete memory Access, Disk memory access)
32. What is meant by Static Variable ?
33. What is meant by QUEUE? {refer any data structures text}
34. What is meant by STACK? {refer any data structures text}
35. The processor used in first IBM PC? (8086, 8088, zig4, intel)
36. Difference between 80286 and 80287
37. In bubble sort , no. of comparisons required ? (ans : formula : $N*(N-1)/2$)
38. No. of comparisons of an item in 100 items by binary comparison?
(10, 25, 50 100)
39. CRT - (Cathode Ray Tube)
40. No. of entry values are there in ideally in a subroutine.
41. Binary tree?
42. Flow in one direction ? (Single linked list, Double linked list,, ..)
43. Electron screen size ? (here, 2 lines of algorithm is given.)

Name the algoirithm)

44. Which is not storage device.? (printer,CD ROM,Disk,none)
45. A question regarding memory ? (least used memory,recently unused memory,..)
46. ISO - (International Standard Organisation)
47. HTML - (Hyper Text Makeup Language)
48. Flow chart for factorial N? (ans :choice a)
49. What is meant by Recursion ?

50. Struct(s)

```
{
  int a;
  long b;
}
Union (u)
{int a;
 long b;
}
```

Print sizeof(s)and sizeof(u) if sizeof(int)=4 and sizeof(long)=4

51.Switch (i)

```
i=1;
case 1
    i++;
case 2
    ++i;
    break;          ( ans : 1,2,3,none)
case 3
    --i;
```

Output of i after executing the program

52. char S;

```
char S[6]= " HELLO";
printf("%s ",S[6]);
```

output of the above program ? (0, ASCII 0, I,unpredictable)

53. Unsigned char c;

```
for ( c=0;c!=256;c++2)
    printf("%d",c);
```

No. of times the loop is executed ? (127,128,256,infinitely)

54. int i;

```
i=0;
repeat
    i=i+1;          <===== PASCAL PROGRAM
    print i;
until(i<10)
end
```

No. of times the loop is executed?

55. Convert (int A,var ,int B;int c)

```
{
  A=10;
  B=4-;
  C=120;
}
Convert (inta,b,c)
{          <===== PASCAL PROGRAM
  a=1;
```


Antonyms :

11. AUSPICIOUS

12. REHALISHLY

13. & 14. - Sentence correction

15, 16 , 17 - Spelling Mistakes

18, 19 - Two Questions

6 letters are assigned certain numbers.

In each question , 4 combination of digits are given . Of which , which gives

a meaningful word.

20 & 21. - 4 sentences will be given in each question. Arrange them in

logical order .

22. 5 straight lines are cut in a circle. A question regarding this.

Reasoning :

- a) If statement A alone is required
- b) If statement B alone is required
- c) If both statements A & B are required
- d) Neither

23. Does Mr. Mathew give tuition ?

- A) Mathew is a teacher
- B) In school, the teacher is not expected to give tuitions.

24. There is no power cut in advanced country

If T is a city, Is there power cut in that city?

- A) Z is a advanced country
- B) T is a capital city of country Z

25. Tanzanians are in East Africa. Tanzanians are good in either Education ,

Dance or Music

- A) Tanzanians are good at Education
- B) East Africa are good at dance & Music.

Remaining questions 26 - 29 are of the same type.

30. On one day, 14 children are admitted in a school by their mothers.

2 are sisters, 3 are brothers, 2 are brother and sister and 2 are twins.

The rest are singles. How many mothers came? (5 , 7, 9, 14)

31. Problem Cisterns & pipes.

It will take 8hrs to fill a cistern. But due to leak at the bottom, it

take 10 hrs to full it. In how many hrs, the full tank will be emptied

because of leak.? (18,8,40,10)

32. Question regarding men & work

- A does alone a work in 4 days
- B does alone a work in 8 days
- C does alone a work in 10 days
- A & B together -----
- C & B together -----

33. In 3.5 Kg rod , there is 74% silver. If it is alloyed with a 0.5 Kg rod,
the % of silver goes p to 84%. The percent of silver in 0.5 Kg rod?

34. Two chords of lengths $2L_1$ and $2L_2$ are drawn in a circle. Their lengths
are inversely proportional to the straight distance joining the
centre.
Find the radius of circle.

35. A Kg of tea costs Rs 49.50 . But the supplier gives 10 gms less
for
every Kg he sold. What is the actual cost.

36 - 40

A question on transportation table. 5 questions were given.

A	B	C	D	E	
A	X	12	8	20	6
B	12	X	12	5	9
C	20	8	X	4	7
D	3	15	6	X	10
E	12	5	8	3	X

A,B,C,D,E denote the stages.

X denote the start of the stage.

The bus goes from A to E and E to A woith back stops at B,C, & D

For each the charge is Rs.0.70

The numbers in the table are how many passengers are there in the bus
upto that stage.(the numbers given the table are not correct)

36. Total no. of passengers in onward journey

37. Total amount in the conductors bag just before the bus reaches
the stage C

38. How many Rs. 1.40 tickets are issued to passengers in backward
journey.

39. If the bus breaks down between the stages C & D , the amount
refunded to
passengers.

40. If the ticket costs Rs.1.50, how much is the profit in Backward
journey.

Remaining 4 questions may be fron English.

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)
- e) Programming languages (20)
- e) Operations 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 lifecycle (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 Dos environment ?  
I said it event driven .  
So what do U mean by event driven ?  
How do WinMain look like ?  
How the messages are processed in Windows ?  
(Queue of events)  
What are parameters needed to distinguish an event ?

Have U done any network programming ?  
Why networks are layered ?  
What is the advantage of that ?  
How many layers are there in OSI ?  
Why is it called OSI model ?  
Are U familiar with network topologies ?  
Which are the different network topologies ?  
Tell an example of bus type network.  
I said ethernet.  
What is the Bandwidth of ethernet ?  
Explain the advantage and disadvantage of ethernet ?  
Which is the protocol used in ethernet. (CSMA/CD)  
Why is it called so ?  
If all stations tries to communicate at same time, what will happen.  
What is binary exponential backoff algo ?

What is the advantage of Ring network ?  
Compare it with ethernet.  
In a real-time system which one do U prefer and why ?  
What is the basic requirement of a real-time network ?  
Which one is costly - ethernet of ring networks ?

Some questions form OOSD and Digital signal processing.  
What is inheritance, encapsulation etc.

Third Round (15 minutes)

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Asked about the percentages and marks during SSC, PDC, B.Tech and MS.

When can U join ?

Who is U'r guide ?

U are from which place ?

Where is it in Kerala ?

How do U perform in the first two interviews ?

WHy have U given Honeywell as dream job ?

Some more personal questions

Fourth Round (45 minutes)

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What do U like in Bangalore ?

I said the weather and all my friends are here.

Asked about my family members.

How do U interact with friends ?

How do adjust to a new environemnt ?

Suppose U solve a problem and after that U are getting an almost same problem with high complexity ( and lower complexity). How will U approach to the next problem.

What is U'r approach towards a new subject ?

How do U prepare for exams ?

Suppose in a project meeting, somebody fires U, how will U react ?

Are U patient enough to wait in long queues ?

Still some more which I don't rememebr.....

Hughes Test MAY be of the following type. This I got from one of my friend.

Hope it'll be useful to you and your friends.

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> > (A) Aptitude : 25 Qns, 20 Minutes

> >

> > 1. 2 x 4 analytical GRE type qns

> > 2. 2-3 Reasoning qns (GRE type)

> > 3. Probability of getting a sum of 7 when two dices are thrown together

> > 4. Rest quantitative questions

> >

> > (B) Technical: 50 Qns, 45 Minutes

> >

> > 1. 3 qns on operating systems. 1 qn on dijkstra algorithm

> >

> > 2. Using which pin it's possible to address 16 bit addresses even though there

> > are only 8 address bits in 8085? Ans: ALE

> > 3. Voltage gain for an amplifier is 100 while it is operating at 10 volts.

> > What is the O/P voltage wen i/p is 1 volt

> > 4. Quality factor indicates a) Quality of inductor b) quality of capacitor

> > c) both

> > 5. Qns related to bridges, routers and generators, which OSI layer

they

> > corresspond to. (Refer to stevens 4th chapter)

> > 6.OPAmp's I/P current, O/p current and CMRR is given, what is the voltage gain

> > 7. 2-3 qns on scope of static variables in C. Qn to view o/p of a C static var

> > 8. Qn to print a value of a pointer

> > 9.resistance increases with temperature in a) Metal b) semiconductor

> > 10. A qn to find the physical address from a given virtual address, virtual to physical address table was provided

> > 11. 16 bit mantissa and 8 bit exponent can present what maximum value?

> > 12. 4 bit window size in sliding window protocol, how many acknowledgements can be held?

> > 13. Security functionality is provided by which layer