Hi bava,

```
I am sending some material that will be of immense help to papa. Just
make her do all of the Q-papers in that.
DHAM
  Date:
       Tue, 01 Sep 1998 11:54:16 +0530
  From:
       CHINNA NARAYANA P <chinna@scada.cmc.stph.net> Add to Address
Book
 Subject:
       [Fwd: ]
    To:
       punuru@mailcity.com, mksharma@cc.iitkgp.ernet.in,
u9752006@iitkgp.ren.nic.in,
       chinnu@rocketmail.com,
                               pvaran@mech.iitkgp.ernet.in
   Here I am sending one attach file to u.It's contains all software
companies Q-papers.U please distribute to all of our friends..
chinna
 Date:
     Mon, 31 Aug 1998 19:16:34 +0530 (IST)
     venu@ee.iitb.ernet.in Add to Address Book
   To:
      "M.Srinivasa Rao" <mss@scada.cmc.stph.net>
Hellow MS
        I am sending all the papers of leading companies. Wipro also
in that file. So Please pass this to ravi. How is ravi. Convey my
wishes
to ravi. Reply me sooooooooooo
                                                     yours,
                                                     Venu....
*~^~^~*~^~^*~^~^*~^~^*~^~
| *~* PERMANANT ADDRESS *~*
                                            *~* PRESENT ADDRESS *~*
```

```
*
    K.V.K.VENU GOPAL,
                                          K.V.K.VENU GOPAL,
  s/o K.VENKATA RAMANA,
                                         ROOM # 214, HOSTEL # 1
     S.RAYAVARAM (POST),
                                          I I T - BOMBAY
    VISAKHAPATNAM (DIST)
                                          POWAI, MUMBAI.
   A.P , INDIA. ZIP: 531 060
                                         INDIA. ZIP: 400 076
 VOICE MAIL: 091-0891-811908
                                          091-022-5781017
             091-08924-34407
                                     091-022-5782545 ext 8877
AWAKE ! ARISE ! AND STOP NOT TILL THE GOAL IS REACHED ...
```

# Huges paper

1) find the probability of getting a number with 7 between 100 and 999 (both inclusive).
ans:

- 2) There are 10 items in a box, out of which 3 are defective. 2 balls are taken one after the other. what is the probability that both of them are defective?

  Ans: 1/15 or 6/90
- 3) Context free grammar is accepted by
- a) finite automata
- b) push down automata
- c) two way bounded automata
- d) both b and c
- 4) which is not a memory management scheme?
- a) buddy system
- b) swapping
- c) monitors
- d) paging Ans: c
- 5) qn. on karnaugh map for simplifying boolean expressions
  - 1 1 -
  - 1 - 1
  - 1 - 1
  - 1 1 -

karnaugh map

- 6) qn. on nand gates .
- 7) context sensitive grammar
- 8) An identifier can start with a letter followed by any number of letter
- or digits .

ans: L.(LUD) \*

- 9) 8MB total memory, 256~k cache , 4k is block size. direct mapping how many different physical memory blocks can be mapped on to the cache.
- a) 64 b) 256 c) 128
- 10) CSMA/CD is used in
- a) token ring
- b) FDDI
- d) ethernet

Ans : d

- 11) In TCP/IP header , checksum contains
- a) sum of all the words
- b) ones complement of the data

```
c) ones complement of the sum of all the words
d) ones complement of the sum in ones complement
Ans : d
12) Max no of Acknowledgements for a 4 bit sequence number in a
sliding window protocol.
      which is a good way of representing varaibles in recursion
a) local variables
b) static varaibles
c) global variables
d)
14) c programs
    func() {
       static int i = 10;
       printf("%d",i);
       i++;
 what is the value of i if the function is called twice ?
Ans : 11
15)
     Qn. on pointers .
     given page table, page size and offset find the corresponding
     physical address
     ans: a (3*1024+576) (pageno*pagesize+offset)
    In a memory chip 4k size and 16bit words to be stored. No of
address and data lines reqd.
Ans) 16 data and 12 address
18) idetify in which pass of the 2 pass compiler
 1) literals
 2) address resolution
 3) listing
 4)
      object code not requires
19)
 a) relocation bits
 b) external names and place where they are located
 c) absolute adress
 d) all the object codes
20) ARP
  a) MAC to IP
  b) IP to MAC
  C)
```

Ans : b

21) On on Balanced tree ? A balanced tree is given and a node is addded

at the leaf and asked to find the no of unbalanced nodes?

- 22) order of Hashing time
- a) 0(1)
- b) 0(n2)
- 4) parse tree
- $s \rightarrow s + s ; s \rightarrow s * s ; s \rightarrow a$

find the no of parse trees for a+a\*a+a

- a) 4
- b) 5
- c) 6

ans: 5

- 25) order of deleting an node from a linked list. (pointer is to an arbitrary node)
- a) 0 (1)
- b) 0 (n)
- 26) A choclate of size nXn is given and is to be made into pices of size
- 1x1. At a time both horizontal and a vertical cut is done. Find the order of complexity
- a) 0(n2)
- b) o(nlogn)
- c) o(logn)

Ans : a

- 27) A directed graph is represented by adjacency list. To find the complexity of indegree of the node. e edge n- vertices a) o(e+n)
- 28) No of leaf nodes given. find the no of nodes with degree 2.
- 29) AX = B. A is mXn and B is mX1 and several options given like a) there is a unique solution if rank of A is same as rank of augumented matrix  $[A \ b]$
- b) there are multiple solutions
- 30) LXI sp,2099h LXI b, 2012h push b
- 31) Which of the following are false (on complexities)
- 32) A,B are sets. A's cardinality is m and B's is n where m < n

how many one to one mappings can be obtained. a) n ^ m b) npm c) mpn d) mcn 33) In scduling algorithmms which are logically executed but suspended a) preemptive b) SJF c) non preemptive d) all the above Ans : a 34) I/O redirection is a) copying programs files through a pipe b) input files are created c) input file taken from existing ones d) none symmetric multiprocessing can be done in a) snoopy protocols b) cache coherence 36) dining philospheres problems to avoid dead lock a) 1 person will take left one and all other will take right one b) adjacent persons should not eat concurrently 36) process states ? which is the correct order a) timeout:ready -> running blocked : ready -> running b) C) d) 37) for converting infix expression to postfix what do we require a) operand stack b) operator stack C) 38) 0 is reprented as both and negative and positive a) ones complement b) twos complement

- c) two's complement has extra negative number
- 39) Difference between c and c++?
- a) In c++ we can define variables in the middle
- b) dynamic scoping
- 40) Which of the following is correct

```
a) Synchronous tranmission needs more badwidth than Asychronous.
b) Inasychronous transmission , the time is associated with data
itself....
future (values / varriables changed - similer paper)
The Ouestions are follows
1. Number of null pointers in any binary tree = n+1
2. max(t1,t2,...tn) = pipelining
3. 50%
        -DBETXXXXXX - density
4. print (Head(T))
  Traverse(left(T))
  print (Head(T))
  Traverse (right (T)) - ans: none of the above
5. Boolean expn Evalvate
6. Common subexpn : - ans : a + e
7. LRU: 1, 2, 3.
8. Tr. Delay - 10000 bits ans. 10.01
9. Grammar of Number of shift / reduce operator : ans. 4
10. CPU scheduling 9,8 ?
11. if even x/2
   else p(p(3x+1))
   2^k + 1: 3 . 2^k - 1 clarify this with sans
12. allocation ans: (ii) only
13.
   swapping : ans: reference only
14. Compiler - related Qn.
15. LAN frames - ? related Qn.
```

16. parameter passing (35,20)

- 17. sliding window protocol
   BUFFER SIZE large
- 18. kernel mode deallocate resource
- 19. logic circuit
   ans . Minimum OR = 3
- 20. Combinatorics related
- 21. priority scheduling
- 22. cobegin begin x = y; x = x+1; y = x begin x = y; z = z+1; y = z coend

ans. Number of values possi = 2

23. 2 bits flip / 2 bits exchange

ans : the word with one '1'

24. any addr  $K^+ v(a) + 2I - 2a$ 

You try to prepare all subject questions in all the papers being sent so that it will be useful in the interview. concentrate on OS, networks.

# PART 1

1). A beggr collects cigarette stubs and makes one ful cigarette with every 7 stubs. Once he gets 49 stubs. How many cigarettes can he smoke totally.

Ans. 8

2). A soldiar looses his way in a thick jungle at random walks from his camp but mathematically in an interesting fashion. First he walks one mile east then half mile to north. Then 1/4 mile to west, then 1/8 mile to south and so on making a loop. Finally hoe far he is from his camp and in which direction. ans: in north and south directions

1/2 - 1/8 + 1/32 - 1/128 + 1/512 -and so on = 1/2/((1-(-1/4)) similarly in east and west directions

 $1-\frac{1}{4}+\frac{1}{16}-\frac{1}{64}+\frac{1}{256}-$  and so on  $=\frac{1}{((1-(-\frac{1}{4})))}$ 

add both the answers

3). hoe 1000000000 can be written as a product of two factors neither of them containing zeros

Ans 2 power 9 x 5 ppower 9 (check the answer)

4). Conversation between two mathematcians:

first: I have three childern. Thew pproduct of their ages is 36. If you sum their ages . it is exactly same as my neighbour's door number on my left. The sacond mathematiciaan verfies the door number and says that the not sufficient . Then the first says "o.k one more clue is that my youngest is the youngest" Immmediately the second mathematician answers . Can you aanswer the questoion asked by the first mathematician?

What are the childeren ages? ans 2 and 3 and 6

5). Light glows for every 13 seconds . How many times did it between 1:57:58 and 3:20:47 am

ans : 383 + 1 = 384

6). 500 men are arranged in an array of 10 rows and 50 columns. ALL tallest among each row aare asked to fall out. And the shortest among THEM is A. Similarly after resuming that to their originaal podsitions that the shorteest among each column are asked to fall out. And the longest among them is B. Now who is taller among A and B?

ans A

7). A person spending out 1/3 for cloths , 1/5 of the remsaining for food and 1/4 of the remaining for travelles is left with Rs 100/- . How he had in the begining ?

ans RS 250/-

8). there are six boxes containing 5, 7, 14, 16, 18, 29 balls of either red or blue in colour. Some boxes contain only red balls and others contain only blue. One sales man sold one box out of them and then he says " I have the same number of red balls left out as that of blue ". Which box is the one he solds out ?

Ans: total no of balls = 89 and (89-29 / 2 = 60 / 2 = 30) and also 14 + 16 = 5 + 7 + 18 = 30

9). A chain is broken into three pieces of equal lenths conttaining 3 links each. It is taken to a backsmith to join into a single continuous one . How many links are to tobe opened to make it?

Ans : 2.

10). Grass in lawn grows equally thickand in a uniform rate. It takes 24 days for 70 cows and 60 for 30 cows . How many cows can eat away the same in 96 days.?

Ans : 18 or 19

11). There is a certain four digit number whose fourth digit is twise the first digit.

Third digit is three more than second digit.

Sum of the first and fourth digits twise the third number.

What was that number ?

Ans : 2034 and 4368

If you qualify in the first part then you have to appear for the second i.e the following part.

### Part 2.

- 1. From a vessel on the first day, 1/3rd of the liquid evaporates. On the second day 3/4th of the remaining liquid evaporates. what fraction of the volume is present at the end of the II day.
- 2. an orange galss has orange juice. and white glass has apple juice. Bothe equal volume 50ml of the orange juice is taken and poured into the apple juice. 50ml from the white glass is poured into the orange glass. Of the two quantities, the amount of apple juice in the orange glass and the amount of orange juice in the white glass, which one is greater and by how much?
- 3. there is a 4 inch cube painted on all sides. this is cut into no of 1 inch cubes. what is the no of cubes which have no pointed sides.
- 4. sam and mala have a conversation. sam says i am vertainly not over 40. mala says i am 38 and you are atleast 5 years older than me. Now sam says you are atleast 39. all the sattements by the two are false. How hold are they realy.
- 5. ram singh goes to his office in the city, every day from his suburbun house. his driver mangaram drops him at the railway station in the morning and picks him up in the evening. Every evening ram singh reaches the station at 5 o'clock. mangaram also reaches at the same time. one day ramsingh started early from his office and came to the station at 4 o'clock. not wanting to wait for the car he starts walking home. Mangaram starts at normal time, picks him up on the way and takes him back house, half an hour early. how much time did ram singh walk.
- 6. in a railway station, there are tow trains going. One in the harbour line and one in the main line, each having a frequency of 10 minutes. the main line service starts at 5 o'clock. the harbour line starts at 5.02a.m. a man goes to the station every day to catch the first train. What is the probability of man catchinhy the first train
- 7. some people went for vaction. unfortunately it rained for 13 days when they were there. but whenever it rained in the morning, they had clean afternood and vice versa. In all they enjoyed 11 morning and 12 afternoons. how many days did they stay there totally
- 8. exalator problem repeat
- 9. a survey was taken among 100 people to firn their preference of watching t.v. programmes. there are 3 channels. given no of

people who watch at least channel 1

" " 2 " " 3

no channels at all

atleast channels 1 and 3

" " 1 and 2 " 2 and 3

find the no of people who watched all three.

10. albert and fernandes they have two leg swimming race. both start from opposite and of the pool. On the first leg, the boys pass each other at 18 mt from the deep end of the pool. during the II leg they pass at 10 mt from the shallow end of the pool. Both go at const speed. but one of them is faster. each boy rests for 4 sec to see at the end of the i leg. what is the length of the pool.

11. T H I S I S

Each alphabet stands for one digit, what is the maximum value T can take

X F X X X X U X X X N X X

- 1. an escalator is descending at constant speed. A walks down and takes 50 steps to reach the bottom. B runs down and takes 90 steps in the same time as A takes 10 steps. how many steps are visible when the escalator is not operating.
- 2. evvery day a cyclist meets a train at a particular crossing. the road is straignt before the crossing and both are travelling in the same direction. cyclist travels with a speed of 10 Kmph. One day the cyclist comes late by 25 min. and meets the train 5km before the crossing. what is the seppd of the train.
- 3. five persons muckerjee, misra, iyer, patil and sharma, all take then first or middle names in the full names. There are 4 persons having I or middle name of kumar, 3 persons with mohan, 2 persons withdev and 1 anil.
- --Either mukherjee and patil have a I or middle name of dev or misra and iyer have their I or middle name of dev
- --of mukherkjee and misre, either both of them have a first or middle name of mohan or neither have a first or middle name of mohan
- --either iyer of sharma has a I or middle name of kumar hut not both.

who has the I or middle name of anil

- 4. reading conprehension
- 5. a bird keeper has got Ppigeon, M mynas and S sparrows. the keeper goes for lunch leaving his assistant to watch the birds.
- a. suppose p=10, m=5, s=8 when the bird keeper comes back, the assistant informs the x birds have escaped. the bird keeper

exclaims oh no! all my sparrows are gone. how many birds flew away.

- b. when the bird keeper come back, the assistand told him that x birds have escaped. the keeper realised that atleast2 sparrows have escaped. what is minimum no of birds that can escape.
- 6. select from the five alternatives A, B, C, D, E

AT THE end of each question , two conditions will be given. the choices are to filled at follows.

- a. if a definete conclusion can be drawn from condition 1
- b. if a definete conclusion can be drawn from condition 2
- c. if a definete conclusion can be drawn from condition 1 and 2
- d. if a definete conclusion can be drawn from condition 1 or 2
- e. no conclusion can be drawn using both conditions
- 1. person 1 says N<5

person says n>5

person 3 says 3N>20

person 4 says 3n>10

person 5 says N<8

whaT IS value of N

- a) 1. no of persons who speak false being less than no of persons who tells the truth.
  - 2. person 2 is telling the truth.
- b) 1. no of persong telling the truth is greater than no of persons telling lies
  - 2. person 5 is telling the truth.
- 7. there are N coins on a table. there are two players A&B. you can take 1 or 2 coins at a time. the person who takes the last coin is the loser. a always starts first
- --1. if N=7
  - a) A can always win by taking two coins in his first chanse
  - b) B can win only if A takes two coins in his first chance.
  - c) B can always win by proper play
  - d) none of the above
- --2. A can win by proper play if N is equal to
  - a) 13 b) 37 c) 22 d) 34 e) 48 ans.e
- --3. B can win by proper play if N is equal to
- a) 25 b) 26 c) 32 d) 41 e) none
- --4. if N<4, can A win by proper play always
- 8. Two turns have vertain pecular charcteristics. One of them always lies on Monday, Wednesday, Friday. \the other always lies on Tuesdays, thursdays and saturdays. On the other days they tel the truth. You are given a conversation.

person A-- today is sunday my name is anil person B-- today is tuesday, my name is bill

answers for selected questions

2. equal

1. 150

3. 8

2. 60 kmph

```
4. 37(M),41(S)
```

- 5. 45 min.
- 6. 0.8
- 7. 18
- 11. T max value = 4

- 3. Mukherjee
- 8. today is tuesday

Verifone Interview.

Here, we had three single man panels. They are seeing the subjects taken and asking questions in that mainly. They didn't go deep into any subject and they were just asking overview. When they catch any new word they are asking about it.

These are some of the questions asked to us. (not to a single person.)

What is a finite Automata.

what is a turing machine.

how many processors are there in a pentium microprocessor. in Sparc. difference between risc and cisc.

is risc always fast.

what is a real time system.

name some real time OS

what are the characteristics of Real time OS.

is DOS a real time OS.

what is a kernel, shell.

what is binary search, traversal, hashing etc.

given a scenario what is the suitable data structure.

write a code to count the no. of 1's in a binary rep. of a number.

memory taken for char \*, int \* etc.

char \*cp; int \*ip; cp++,ip++ - what is the result.

compare the no. of bytes in unix and Dos for long char short int.

how to make programs portable on unix and Dos under such circumstances

in c++, what is a constructor, destructor etc.

what is friend etc.

what is waterfall model, prototype model etc.

what is testing. what is unit testing, integration testing etc.

What is indexing in databases?

What is atomicity?

Can recursive pgms be written in C++, Write a recursive pgm to calculate factorial in c++.

What is best data structure to store the processes info in a real time operating system?

#### VERIFONE

Verifone test Questions :

There are two parts:

1. Aptitute test : 15 Minutes, 20 Questions

Some questions are:

(not in order)

- 1. A question (first one) on addition of fraction of inches a. was the answer
- 2. There were 36 chairs, how many ways can they be placed such that all rows have equal no. of chairs and atleast three chairs are there in each row and there are atleast three rows.

  5 ways.
- 3. There are 27 balls, of which 1 is heavier. given a balance how many times you need to weigh to find out the odd ball.

  3 Weighs.
- Product of three consecutive nos. 210. What is the sum of two least numbers
   11.
- 5. If the area of the sqaure is increased by 69 % how much the length of the side will increase?

  30%
- 6. if the sum of five consecutive nos. 35? how many prime nos are there:
  2 primes.
- 7. if the length of the rectangle is reduced by 20% and breath is increased by 20% what is the net change ?  $4\% \ \text{decrease}$
- 8. A question on sets.

  There are some 20 Basketball players & 30 Football players, and 25 cricket players. 1 of them plays all the three games. 8 of them plays atleast two games. They are 50 altogether.

How many of them plays none of the games.

- 9. A question on directions.

  B is 20 miles east of A. D is 30 miles east of C. E is 10 miles
  - north of D. C is 20 miles north of B. How far E is from A?

Some 3 questions on Reasoning like,

10. If you say that giving stock options to employees increases the

productivity of the company, which of the following sentences support it.

A) Giving stock options increases the morale of the employees ..

. .

t.

etc.,

11. Gamblers comes to the Amusement parks. There are some Amusemen

parks in each city. There are some gamblers in each city. So what can you infer.

A) Amusement park always have gamblers.

. .

etc.,

- 2. Technical Ouestions.
- i. Electrical & Electronics : 15 Questions1.A Circuit with nand gates. (ans. may be XOR)
  - 2.CMRR. relates to (options not in order)
     voltage follower
     non invering amplifier
     inverting amplifier
     integrator
  - 3. Given a circuit , give the ouput.
     (ans. may be triangular wave.)
  - 4. o/p of an assembly code. mulitply by 11.
  - 5. how to handle asynchronous events.
    - a) polling
    - b) interrrupt

etc.

- ii)Data Structures, Algo., & Complexity theory : 5 questions
- iii) OS : 5 questions
- iv) Networks and Hardware: 5 questions
- v) Databases and Misc.: 5 questions
- vi) C Pgm. : 5 questions some more 10 questions.
- 1. if W is a sequence of strings without a and W' is its reversal

then WaW' is accepted by:

Context Free Grammmars

- 2. Whether all recusive pgm can be written iteratively? yes.
- 3. What data structes you will use if you want to go to first record from

the last and vice versa?

doubly linked circular list

- 4. Given 10000 nos. and 48MB Memory. What is the complexity of the efficient sorting algo.? (the algo. is not mentioned) O(N)
- 5. Given a C code and ask what it does? code was something similar to Bubble sort and that particular code does the sorting in Desending order and the complexity is  $O(n^2)$  (which is the next question).
- 6.

A code like this is given.

- a. for (i=0; i<num; i++)
- b. for(i=num;i>0;i--)

Assuming no code optimization and assume that the microprocessor has flags etc. which one is correct.

b will execute faster.

- 7. If there are too many page faults what is the problem?
- 8. To ensure one pgm. doesnt corrupt other pgm. in a Multi-pgm enviornment

what you should do?

- 9. Which one you will use to implement critical section?

  Binary Semaphore
- 10. Which one is not needed for Multi-processing. enviornment? options are: virtual memory, security, time sharing, none of the above.
- 11. Which one is not done by Data link layer ? bit stuffing, LRC, CRC, parity check
- 12. Which one is not related to Data link layer?
- 13. Which one is not suitable for client-server application? tcp/ip, message passing, rpc, none of the above.

14. What is SQL.

```
Procedural Relational DB Query Language.
15. Indexing in databases give you
       options were like 1.efficient deleting and inserting
                         2.efficient deleting.
                           etc.
16. int a=1, b=2, c=3;
   printf("%d,%d",a,b,c);
        What is the output?
17. Scope of Static Variable ......
        in a file.
18. for(i=0; i <= 10; i++, printf("%d", i)); +- (+- is there in the
questions)
20. Real Time Os should have
   a) fast context switch
   b) Virtual memory etc.
21. Messages are transferred in some E71 code, where after 7 bits of
data,
1 bit of stopping data is to be transferred. what should be done.
     options were like
         a) send directly
         b) send after encoding
                  etc.
22. There are three processes A, B, C. A sends data to B. B removes th
header stores it and sends the data to C. C returns it to B. B receive
the
message, identifies the message and adds the header that was stored an
sends to A.B receives the messages from C such that atmost 'm' message
S
are pending.
     Identify the best Data Structure.
     A question in compiler about the heap and stack allocation of
memory.
24.
    struct
          char a[3];
```

```
int b;
          } x ;
     char *cp;
      a) size of x is 7.
     b)
      C)
      d) cp takes the size of a pointer.
          (d) is the ans.
I am sending format of ORACLE. I just sent you Verifone (some questions
ORACLE
section 2:
   1. what is sparese matrices?. give (at least) two methods for
implemetation
      rather than two dimentional array.
   2.what are cheap locks/latches?.
   3.what is two phase locking?. Name two locks.
   4. What are volatile variables in C?. What is their significance ?.
   5. will these two work in same manner
      #define intp int *
      typedef int * inpp;
   6. what are binary trees?. what is its use?.
   7.
section 3:
 A). write header file containing functions used, etc (C),
    problem is to maitain a Queue. user has to give size and type of
Queue.
   This problem is like this I don't remember exactly.
B). C++
  1. What is polymorphism?
  2. What is Inheritence?.
  3. Mention four Object Oriented Programming Languages?>
  4. Mention basic concepts of OOP.
  5. What are messages in OOP?.
  6. What is garbase collection?.
  7.what is object?.
  8. what is a class?.
```

# section 4:

- 1. expand the following:
  - a.SEI b. ISO
- 2. what are different levels of SEI?.
- 3. What is significance of ISO?>
- 4. Expand the following:
  - a. WWW
  - b. HTTP
  - c. HTML
  - d. TCP/IP
- 5. what is Black box testing?.
- 6. explain the following:
  - 1. white box testing
  - 2. white box testing
  - 3. boundary testing
  - 4 stress
  - 5. negative
  - 6. system
  - 7. unit
  - 8.module
  - 9.destructive

# INFOSYS

- 1) There are two balls touching each other circumferencically. The radius of the big ball is 4 times the diameter of the small ball. The outer small ball rotates in anticlockwise direction circumferencically over the bigger one at the rate of 16 rev/sec. The bigger wheel also rotates anticlockwise at Nrev/sec. what is 'N' for the horizontal line from the centre of small wheel always is horizontal.
- - Q) Strike off any digit from each number in seven rows (need not

be at same place) and combine the same operations with 3 digit number  ${\bf s}$ 

to get the same addition. After this strike off another digit from al

and add all the No.s to get the same 2 digit No. perform the same process again with 1 digit No.s. Give the 'no.s in 7 rows at each stage.

- 3) there is a safe with a 5 digit No. The 4th digit is 4 greater than second digit, while 3rd digit is 3 less than 2nd digit. The 1st digit is thrice the last digit. There are 3 pairs whose sum is 11. Find the number. Ans) 65292.
- 4) there are 2 guards Bal and Pal walking on the side of a wall of a wearhouse ( $12m \times 11m$ ) in opposite directions. They meet at a point and Bal says to Pal " See you again in the other side". After a few moment s

of walking Bal decides to go back for a smoke but he changes his direction again to his previous one after 10 minutes of walking in the other(opposite) direction remembering that Pal will be waiting for to meet. If Bal and Pal walk 8 and 11 feet respectively, how much distance they would have travelled before meeting again.

5) xxx)xxxxx(xxx)

3xx -----

XXX

хЗх

\_\_\_\_\_

xxx

Зхх

\_\_\_\_\_

Q) Find the 5 digit No.

Hint: 5 is used atleast once in the calculation.

- 6) Afly is there 1 feet below the ceiling right across a wall length is 30m at equal distance from both the ends. There is a spider 1 feet above floor right across the long wall eqidistant from both the ends. If the width of the room is 12m and 12m, what distance is to be travelled by the spider to catch the fly? if it takes the shortest path.
- 7) Ramesh sit around a round table with some other men. He has one rupee more than his right person and this person in turn has 1 rupee more than the person to his right and so on, Ramesh decided to give 1 rupee to his right & he in turn 2 rupees to his right and 3 rupees to his right & so on. This process went on till a person has 'no money' to give to his right. At this time he has 4 times the money to his right person. How many men are there along with Ramesh and what is the money with poorest fellow.

- 8) Question related to probabilities of removing the red ball from a basket, given that two balls are removed from the basket and the other ball is red. The basket contains blue, red, yellow balls.
- 9) Venkat has 1boy&2daughters. The product of these children age is 72. The sum of their ages give the door number of Venkat. Boy is elder of three. Can you tell the ages of all the three.

### ANALYTICAL

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- 1) L:says all of my other 4 friends have money M:says that P said that exact one has money
- N:says that L said that precisely two have money
- O:says that M said that 3 of others have money.
- P:Land N said that they have money.
  - all are liers. Who has money & who doesn't have?
- 2) A hotel has two, the east wing and the west wing.some east wing rooms but not all have an ocean view(OV). All WW have a harbour view(HV). The charge for all rooms is identical, except as follows
- \* Extra charge for all HV rooms on or above the 3rd floor
- \* Extra charge for all OV rooms except those without balcony
- \* Extra charge for some HV rooms on the first two floor&some EW rooms without OV but having kitchen facilities. (GRE modrl Test 3-question 1J-22)
- 3) Post man has a data of name surname door no.pet name of 4 families. But only one is correct for each family. There are a set of statements &questions.
- 4)4 couples have a party. Depending on the set of statements, find who insulted whom and who is the host of the party.
- 5)5 women given some of their heights(tall, medium, short) Hair(long, plainted), stards(Black or Brown), sari, 2 medium, 2-short. Tall->no sari.Plainted->medium. Answer the combinations.
- 1) A person has to go both Northwards&Southwards in search of a job. He decides to go by the first train he encounters. There are trains for every 15 min both southwards and northwards. First train towards south is at 6:00 A.M. and that towards North is at 6:10 . If the person arrives
- at any random time, what is the probability that he gets into a train towards North.
- 2) A person has his own coach&whenever he goes to railway station he takes his coach. One day he was supposed to reach the railway station at 5 O'clock. But he finished his work early and reached at 3 O'clock. Then he rung up his residence and asked to send the coach immediately. He came to know that the coach has left just now to tje railway station.

He thought that the coach has left just now to the railway station. He thought that he should not waste his time and started moving towards his residence at the speed of 3mi/hr.On the way, he gets the coach and reaches home at 6 o'clock. How far is his residence from railway station.

3) Radha, Geeta&Revathi went for a picnic. After a few days they forgot date, day and month on which they went to picnic. Radha said that it was

onThursday, May 8 and Geeta said that it was Thursday May 10. Revathi said Friday Jun 8. Now one of them told all things wrongly, others one thing wrong and the last two things wrongly. If April 1st is tuesday what is the right day, date and month?

SIEMENS INFO

intialisation

```
THIS PAPER CONSISTS 6 PARTS. all are multiple choice q's
 1) general
 2)c/unix
 3)c++/motif
 4) database
 5)x-windows
 6) ms-windows
 we have written q's not acc. to each part.total 50. q's. time is
if u have basic idea about all of the u can easily answer the paper.
paper
1) which of following operator can't be overloaded.
a) == b) ++ c) ?! d) <=
2) #include < iostream.h>
 main()
printf("Hello World");
the program prints Hello World without changing main() the o/p should
```

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```
Hello World
 Desruct
 the changes should be
a)iostream operator<<(iostream os, char*s)</pre>
os<<'intialisation'<<(Hello World)<<Destruct
         d) none of the above
3) CDPATH shell variable is in (c-shell)
a) b) c) d)
4) term stickily bit is related to a)kernel
b) undeletable file
    d) none
5) semaphore variable is different from ordinary variable by
6) swap(int x,y)
int temp;
temp=x;
x=y;
y=temp;
}
main()
int x=2; y=3;
swap(x,y);
after calling swap , what are yhe values x&y?
7) static variable will be visible in
a) fn. in which they are defined
b) module "
c) all the program
d) none
8) unix system is
a) multi processing
b) multi processing , multiuser
c) multi processing , multiuser, multitasking
d) multiuser, multitasking
9)x.25 protocol encapsulates the follwing layers
a) network
b) datalink
c) physical
d) all of the above
e) none of the above
10) TCP/IP can work on
a) ethernet
b) tokenring
c)a&b
d) none
11)a node has the ip address 138.50.10.7 and 138.50.10.9.But it is
transmitting data from node1 to node2only. The reason may be
a) a node cannot have more than one address
b) class A should have second octet different
```

```
**
                                           11
c)classB
d) a, b, c
12) the OSI layer from bottom to top
13) for an application which exceeds 64k the memory model should be
a) medium
b) huge
c)large
d) none
14) the condition required for dead lock in unix sustem is
15) set-user-id is related to (in unix)
16) bourne shell has
a) history record
b)
C)
d)
17) wrong statement about c++
a) code removably
b) encapsulation of data and code
c)program easy maintenance
d)program runs faster
18) struct base {int a,b;
base();
int virtual function1();
struct derv1:base{
int b, c, d;
derv1()
int virtual function1();
struct derv2 : base
 {int a,e;
base::base()
a=2;b=3;
derv1::derv1() {
b=5;
c=10; d=11; }
base::function1()
{return(100);
derv1::function1()
return (200);
}
main()
base ba;
derv1 d1, d2;
printf("%d %d",d1.a,d1.b)
```

```
o/p is
a) a=2; b=3;
b) a=3; b=2;
c) a=5; b=10;
d) none
19) for the above program answer the following q's
main()
base da;
derv1 d1;
derv2 d2;
printf("%d %d %d",da.function1(),d1.function1(),d2.function1());
o/p is
a) 100, 200, 200;
b) 200, 100, 200;
c) 200, 200, 100;
d) none
20) struct {
int x;
int y;
}abc;
you can not access x by the following
1) abc-->x;
2) abc [0] -->x;
abc.x;
(abc) -->x;
a) 1, 2, 3
b) 2&3
c)1&2
d)1,3,4
21) automatic variables are destroyed after fn. ends because
a) stored in swap
b) stored in stack and poped out after fn. returns
c) stored in data area
d) stored in disk
22) relation between x-application and x-server (x-win)
23) UIL (user interface language)
                                     (x-win)
24) which is right in ms-windows
a) application has single qualue system has multiple qualue
b) "
                     multiple "
                                                single
C) "
                                                multiple
d) none
25) widget in x-windows is
26) gadget in x_windows is
27) variable DESTDIR in make program is accessed as
a) $ (DESTDIR)
b) ${DESTDIR}
c) DESTDIR
d) DESTDIR
28) the keystroke mouse entrie are interpreted in ms windows as
a) interrupt
```

```
b) message
c) event
d) none of the above
29) link between program and out side world (ms -win)
a) device driver and hardware disk
b) application and device driver
c)application and hardware device
d) none
30)ms -windows is
a) multitasking
b)
   C)
         d)
31) dynimic scoping is
32) after logout the process still runs in the background by giving
the command
a) nohop
b)
33) process dies out but still waita
a) exit
b) wakeup
c) zombie
d) steep
34) in dynamic memory allocation we use
a) doubly linked list
b) circularly linked
c) B trees
d) L trees
e) none
35) to find the key of search the data structure is
a) hask key
b) trees
c) linked lists
d) records
36) data base
 _____
_____
employ_code salary
                                        employ_code
                                                           leave
_____
                                                     from
                                                              t
0
_____
                                          1238
1236
               1500
1237
              2000
                                          1238
                                                     ___
1238
               2500
                                          1237
```

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1237

1237 1237 select employ\_code,employ\_data ,leave the number of rows in the o/p a) 18 b) 6 c) 7 d) 3 37) DBMS 38) read about SQL, db 39) which is true a) bridge connects dissimiler LANand protocol insensitive b)router " c)gateway " d) none of the above 40) read types of tree traversals. 41)42)43) simple programs on pointers in c

BEST OF LUCK

Novell network paper

The paper consists os three sections.

- 1. aptitude 15 questions 20 min.
- 2. system concepts 20 questions 20 min.
- 3. 'c' 15 questions 20 min.

#### NOTE::::

I'm sendin the questions, somany have no answers. U do check the answers for all the given questions also.

All questions are MULTIPLE CHOICES ONLY.

U do try to cover the related topics to get some understanding. In interview They are asking C C++ Operating system concepts and Networks.

They will ask about Ur interesting subjects, U try to have good grip on those intresting subjects.

They selected 11 out of 55 students.

They asked about c c++ project work and OS, NETWORKS. But they selected only 2 , one from CS and another is BTech ECE.

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## SECTION 1 is main factor selection to the interview

```
In the interveiw you should be very active .And should be frank to say
no also. One CS student said that he don't know NETWORK and he hasn't
taken NETWORKS subject. But he has selected.
      OK BEST OF LUCK.
section 1:::;
*. GRE book test paper 3 section 5
question no. 8 to 12 (ships WXYZ starting on dec. 23rd.....)
* 5 programs are sheduled from monday to saterday, monday is not
holiday,
PQRST are the programs. The day before P is holiday, and some other
clues are
given, we have to find the sequence (4 questions)
ANS: tuesday is the holiday
     P comes on wednesday ,
     U can do the remaining very easily.
* Suppose U R the presoner, There are two guards Who will tell truth o
one will tell truth. There is a gate for liberty and another foe hell.
Some questions are given, like
   i. are U tell truth?
    ii. another tell truth or not??
   iii. both of U R telling truth??
    iV. both of U lieing??
   V. -----
    they gave a. b. c. d. and asking about which sequencing is
sufficient to
    find the gate for liberty??
    ( I can't give exact thing)
* There are WIFE and HUSBAND at one side of river. They have one child
They want to cross the river. The child can't be lonly. The boat boy
won't
permit morethan one to cross the river, what is the correct way to
cross the river??
```

```
* There are 7 targets, A B and C has to shoot them. All should be
shooted
consicutively.
    1. The no. of chances for A and B are not less thn 2,
    2. for C there is only one chance.
    3. A can't shot 3 times considutively.
    4. B is permited to shoot in even chances only.
    They have given some 3or 4 questions on this
*
section 3::
1.Max value of SIGNED int
    a. b. c. d.
2. One questin is given, long one, to find the answer U should be
femiliar
with the operation as follows
int *num=\{10,1,5,22,90\};
main()
{
int *p, *q;
 int i;
 p=num;
 q=num+2;
 i=*p++;
 print the value of i, and q-p, and some other operations are there.
 how the values will change??
3. One pointer diff is given like this:
 int *(*p[10])(char *, char*)
 asked to find the meaning.
4. char *a[4]={"jaya", "mahe", "chandra", "buchi"};
  what is the value of sizeof(a)/sizeof(char *)
   a. 4 b.bytes for char c-- d.--
( we don't know the answer)
5. void fn(int *a, int *b)
   int *t;
```

t=a;

```
a=b;
    b=t;
    main()
    int a=2;
    int b=3;
     fn(&a,&b);
     print the values os a and b;
     what is the output--- out put won't swap, the same values remain.
     a. error at runtime
     b. compilation error
     c.2 3
     d. 3 2
6.
#define scanf "%s is a string"
main()
{
printf(scanf, scanf);
what is the output.
ANS: %s is string is string
7. i=2+3,4>3,1;
   printf("%d"i);
   ans is 5 only.
8. char *p="abc";
   char *q="abc123";
   while (*p=*q)
    print("%c %c",*p,*q);
    a. aabbcc
    b. aabbcc123
    c. abcabc123
    d. infinate loop ( this may be correct)
```