| 1-10 questions of | the type |
|---------------------------|--|
| Rose is be | eautiful flower. |
| Options: a, an, the | , none |
| 11-16 Reading cor | nprehension on computer protection and security |
| _ | nprehension on Databases (Actually you don't need to read the passage answer without reading it its so trivial) |
| Analytical: (30 q | uestions 30 minutes) |
| the strength of the | n from first. 29th from last in a test. 6 boys did not come. 3 failed what is e class 22-26 problems on sets eg 15 speak Tamil 25 speak Tamil and ple how many speak Tamil alone. etc(Do not remember exact figures) |
| three, 32 play foot | n sets eg 54 boys play cricket.61play football,66 play tennis. 24 play all tball and cricket, 15 play foot ball and tennis. How many players played II, tennis same kind of problem on white ,green and yellow kites |
| 33-37 Typical anna | als question(u find in RS Agarwals) |
| 6 movies need to b | e screened in a movie festival. The slots are 9.30,10.30,1 3.30 5.30, 7 |
| | fternoon or morning B cannot screen before C nobody else can screen g(similar conditions Watch out we all ran out of time trying to attempt |
| [anted in such a v | n cube. A cube is painted with three colures namely Red, yellow ,green its way that colors are on the adjacent sides are not same. The cube is cut so that . How many cubes with one color, two color, three color etc. |
| enough to get the | on and Two statements would be given Mark A if statement 1 alone is answer. B if statement 2 alone is enough, C if statement 1 and 2 are wer cannot be arrived at |
| eg 1.P-X>0 | |

2., pX>0

is p positive.

46-50 Question on cube. 16 cubes are kept on top of which 4 cubes r kept at the centre, on top of that 2 cubes are kept and on top of that one cube is kept. It is painted from top to bottom. How many cubes with 1,2,3,4, 0,sides painted.

Mental Ability (15 questions 25 minutes)

51-53 Questions on pattern matching. Like mark A if first and third are identical, B if second and third are identical, C if first and second are identical D if they are different.

54-59 Questions of the form if +is - and - is * . * is / and / is + then find 12/3*5-2+5

60-62 A set of conditions for admissions of a school student is given like he should be in top 20 in the entrance test or should have sports excellence etc.. and questions of different cases are given and we need to find if the candidate can be admitted or not.

63-65 Similar questions for recruitment of cook. He should be 25 years of age with 3 years experience if he has lesser exp. he should meet the head cook . if he is below 25 years he should meet the manager and questions on various cases.

Technical (C and DS):

66. Of the following select a code to print a singly link list in a reverse order.

67. select a code to print elements of a DE queue

69. Find a declaration of ADT of a polynomial.

- 70. Select code that shows DFS of a graph
- **71**. Select the statement that appropriately fills the DFS algorithm

Directions for question No:1-6

Your answers for each questions below would be

- A, if all 3 items given in the questions are exactly alike.
- B, if only the first and second items are exactly alike.
- C, if only the first and third items are exactly alike.
- D, if none of the above.
- 1) 5344544445 5344544445 5344543445
- a)A b)B c)C d)D
- 2) 8472.9200602 8472.9200602 8472.9200602
- a)A b)B c)C d)D
- 3)6461.4421129 6461.4421129 6461.4421129
- a)Ab)Bc)Cd)D
- 4) 2001.7886162 2001.7786162 2001.7885162
- a)Ab)Bc)Cd)D
- 5) KVKVKVKVVV KVKVKKVVVV KVKKVVVVVV
- a)Ab)Bc)Cd)D
- 6) Arizona Desert Arizona Desert Arizona Desert
- a)Ab)Bc)Cd)D
- 52) If * stands for -, /stands for +, +stands for *, then which of the following is TRUE?

A) 32/14*6+40-8=44.8 B) 14*8/6+40-8=16.8 c) 32*6/14+32-8=9.9 D) 32/6*14+32-8=18.9 53) If * stands for /, /stands for -, +stands for * and -stands for +, then 17/5*4+19-8? A)1.25 B) 24.5 C) 12.8 D) 22.4 54) If + stands for 'division', * stands for 'multiplication' and / stands for 'subtraction', then which of the following equations is CORRECT? A) 36*6+7/2-6=20 B) 36/6+3*5-3=45c) 36+6-3*5/3=24D) 36-6+3*5/3=7455) If * stands for /, / stands for -, + stands for *, - stands for +, then which of the following equations is TRUE? A) 28/10*6+80-12=20 B) 10*12/6+80-12=49.3 c) 28*6/10+28-12=3.1D) 12*28/6+80-12=448 56) If * stands for +, / stands for *, + stands for -, - stands for /, then which of the following equations is TRUE?

- A) 8*12/8+40-12=32.7
- B) 20*8/8+20-12=8
- c) 12*20/8+40-12=-16
- D) 20/8*8+40-12=164.7
- 57) If * stands for -, / stands for +, + stands for /, stands for *, then which of the following equations
- is TRUE?
- A) 20/16*4+90-12=35.58*12/8+40-12=32.7
- B) 16*12/4+90-12=3.5
- c) 20*4/16+20-12=-8
- D) 12*20/4+90-12=4

Directions for Questions 1-4:

The following criteria have laid down for admission to professional PG course in the university. The candidate must:

- i) be between 18-27 years of age as on 1 march 2004
- ii) have secured not less than 60% out of 900 marks in the entrance examination and not less than 50% in the interview of 100 marks
- iii) be ready to deposit Rs. 75000 as annual course fee.
- iv) Must have secured 65% in graduation.

However, in case the candidate fulfills all conditions EXCEPT:

- a.condition
- (iii), but has a score of more than 70% in the entrance examination and more than 55% in the interview, refer to the director.

condition

- (iv), but has more than 55% in graduation and can deposit rs.100000 per annum as tuition fees, refer to the admissions in charge.
- 1)Samarth is a B com with 65% marks. He is ready to pay rs75000 per annum as tuition fees. He was born on 30 may 1976 and has scored more than 64% in the both the entrance examination and the interview. He is:
- a)not admitted

b)admitted c)referred to the admissions in charge d)referred to the director 2)Chitra secured more than 66% in both the entrance examination and in the interview. She was born on the 14th of April 1979 . she completed her Bsc with botany as her specialization with 70% marks. She is: a)not admitted b)admitted c) referred to the admissions in charge d)referred to the director 3)Arjun completed BA, English literature with 63%marks. He scored 552 in the entrance examination and 64 marks in the interview. He was born on 10 December 1984 and is ready to deposit rs.100000 per annum as tuition fees. He is: a)not admitted b)admitted c)referred to the admissions in charge d)referred to the director 4)Supriya completed her graduation with 66% marks. She is 21 years old. She cannot the requisite tution fee at the time of admission. She secured 62 marks in the interview and 637 marks in the entrance test. She is: a)not admitted b)admitted c)referred to the admissions in charge d)referred to the director Directions for questions1-4: a rating company needs to appoint financial analysts in an organization. The candidate

must:

- i. be a graduate in any discipline with at least 60% marks
- ii. not more than 30 years of age as on 1 may 2003
- iii. be either a CA ,ICWA, or MBA Finance or CFA as professional qualification
- iv. have at least 4 years of work experience
- v. have cleared the written examination conducted by the organization with at least 50% marks

however, if a candidate fulfills all conditions EXCEPT:

- 1. condition
- (iii), but has done B com with at least 55% marks, refer to the director.
 - 1. Condition
- (iv), but has a Phd degree along with the professional qualification, refer to the chairman.
- 1)Puneet was born on 10 august 1974. he joined an organization immediately after completing his CA. He secured 55% and 67% marks in the graduation and the written examination conducted by the

organization respectively. He is:

- a)selected
- b)rejected
- c)referred to the chairman
- d)data inadequate
- 2)Ajay got 70% and 60% marks in graduation and the written examination conducted by the organization respectively. He has been working for the last 2 years after completing his CFA and Phd in

2000 at the age of 27. he is:

- a)selected
- b)rejected
- c)referred to the chairman
- d)data inadequate

- 3) Nitin completed his ICWA and has been working ever since. He was born on 28 june 1977 . he scored 70% and 50% marks in the graduation and the written examination conducted by the organization . he is:
- a)selected
- b)rejected
- c)referred to the chairman
- d)data inadequate
- 4) Jayesh did his Mcom with 60% marks at the age of 24 in the year 1998. he secured 55% marks in graduation and 60% in the written examination conducted by the organization. He is:
- a)selected
- b)rejected
- c)referred to the chairman
- d)data inadequate

Interview Questions

- 1. Why paging is used?
- 2. Which is the best page replacement algo and Why?
- 3. What is software life cycle?
- 4. How much time is spent usually in each phases and why?
- 5. What is testing?
- 6. Which are the different types of testing?
- 7. Which are the different phases in Software life cycle (asked again)
- 8. Why is analysis and testing phases very important?
- 9. Why networks are layered? What is the advantage of that?
- 10. How many layers are there in OSI ? Why is it called OSI model ?
- 11. Network topologies?
- 12. Which are the different network toplogies?
- 13. An example of bus type network.
- 14. What is the Bandwidth of ethernet?
- 15. Explain the advantage and disadvantage of ethernet?
- 16. Which is the protocol used in ethernet. (CSMA/CD) Why is it called so?
- 17. What is the advantage of Ring network?
- 18. Compare it with ethernet.
- 19. What is inheritance, encapsulation etc.
- 20. If there are too many page faults what is the problem?
- 21. To ensure one pgm. doesnt corrupt other programme. in a Multi-programme. environment what you should do?
- 22. Which one you will use to implement critical section? Binary Semaphore
- 23. Which one is not needed for Multi-programme enviornment?
- 24. options are: virtual memory, security, time sharing, none of the above.
- 25. Which one is not done by Data link layer? bit stuffing, LRC,CRC,parity check

- 26. Which one is not related to Data link layer?
- Which one is not suitable for client-server application? tcp/ip,message 1. passing,rpc,none of the above.
- Term stickily bit is related to a)kernel b)undeletable file c) d)none

```
2.
              Semaphore variable is different from ordinary variable by ?
     3.
     4.
              Unix system is
        multi processing
        multi processing , multiuser
        multi processing ,multiuser,multitasking
        multiuser, multitasking
e) protocol encapsulates the follwing layers
a)network
b)datalink
c)physical
d)all of the above
e)none of the above
f)TCP/IP can work on
a)ethernet
b)tokenring
c)a&b
d)none
g)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
c)classB " " " " "
```

d)a,b,c

| h)The OSI layer from bottom to topvfor an application which exceeds 64k the memor model should be |
|---|
| a)medium |
| b)huge |
| c)large |
| d)none |
| i)The condition required for dead lock in unix sustem is set-user-id is related to (in unix) |
| bourne shell has |
| a)history record |
| d) wrong statement about c++ |
| a)code removable |
| b)encapsulation of data and code |
| c)program easy maintenance |
| d)program runs faster |
| j)which is true |
| a)bridge connects dissimilar LAN and protocol insensitive |
| b)router " " " " " |
| c)gateway " " " " " |
| d)none of the above |
| e)const char * |
| char * const |
| f)What is the difference between the above tow?. In Unix inter process communication take place using?. About i-node numbers Max relax able permission value with out giving write permission to others?. About In(linking) |

- 5. About In(linking)
- 6. Linking across directories?.
- 7. Process id for kernell process
- 8. Very first process created by kernell
- 9. Function to repaint a window immediately?.
- 10. Function entry for DLL in win3.1 win 3.1 is awin 3.1 supports which type of multi tasking?.

- 11. Message displayed when a window is destroyedAbout fork()?
- 12. About send message and post message
- 13. Message to limit the size of window
- 14. System call executable binary file into a process
- 15. About GDI object?.
- 16. API used to hide window
- 17. Initialize contents of a dialog?.

C SKILL SET

- 1. How do you write a program which produces its own source code as its output?
- 2. How can I find the day of the week given the date?
- 3. Why doesn't C have nested functions?
- 4. What is the most efficient way to count the number of bits which are set in a value?
- 5. How can I convert integers to binary or hexadecimal?
- 6. How can I call a function, given its name as a string?
- 7. How do I access command-line arguments?
- 8. How can I return multiple values from a function?
- 9. How can I invoke another program from within a C program?
- 10. How can I access memory located at a certain address?
- 11. How can I allocate arrays or structures bigger than 64K?
- 12. How can I find out how much memory is available?
- 13. How can I read a directory in a C program?
- 14. How can I increase the allowable number of simultaneously open files?
- o) What's wrong with the call "fopen("c: ewdirfile.dat", "r")"?

Verizon Technical Paper 1

Section I – Unix Programming

- 1) works as a command interpretor
- A) Hardware B) Kernal C) Shell D) CPU
- 2) The major no for a floppy disk device is
- A) 1 B) 3 C) 2 D) 4
- 3) chown
- A) Changes the mode of operation to kernel mode
- B) Creates a thread
- C) Changes the users and/or group ownership of each given file
- D) Creates a child process
- 4) lilo
- A) Uninstalls the boot loader
- B) Installs the boot loader

- C) Is a login utility
- D) Invokes a daemon to logoff
- 5) netdevice
- A) Provides low level access to Linux network devices
- B) Provides low level access to Linux storage devices
- C) Provides an interface to communicate with graphic devices
- D) None of the other option listed for this question
- 6) The process which terminates before the parent process exits, is called as
- A) Zombie
- B) Orphan
- C) Child
- D) None of the other option listed for this question
- 7) Context switch means
- A) Kernel switches from executing one process to another.
- B) Process switches from kernel mode to user mode.
- C) Process switches from user mode to kernel mode.
- D) None of the other option listed for this question
- 8) The following socket provides two way, sequenced, reliable and unduplicated flow of data with no

record boundaries.

- A) Sequential packet socket
- B) Datagram socket
- C) Stream socket
- D) Raw socket
- 9) Identify the point(s) that is not true w.r.t. signals
- A) Signals are software generated interrupts that are sent to a process when an event happens
- B) Signal delivery is analogous to hardware interrupts in that a signal can be blocked from being

delivered in the future.

- C) Most signals are synchronous by nature.
- D) Most signal cause termination of the receiving process if no action is taken by the process in

response to the signal.

- 10) Identify the point(s) that is true wrt Semaphore
- A) Only one process at a time can update a semaphore.
- B) All the other options listed for this question
- C) They are often used to monitor and control the availability of system resources such as shared memory segments.
- D) Is a process with exclusive use of a semaphore terminates abnormally and fails to undo the operation or free the semaphore, the semaphore stays locked in the state the process left it.

RDBMS

- 1) When a single entity is related to itself then the relationship is termed as
- A) ONE -TO-ONE
- B) ONE-TO-MANY
- C) RECURSIVE
- D) MANY-TO-MANY
- 2) means allowing objects of different types to be considered as examples of higher level set
- A) AGGREGATION
- B) SPECIALIZATION
- C) GENERALIZATION
- D) DECOMPOSITION
- 3) The primary characteristic of a key field as that it must be
- A) A NAME
- B) TEXT
- C) UNIQUE
- D) ALL OF THE OTHER OPTION LISTED FOR THIS QUESTION
- 4) What kind of relationship exist between customers and salespersons if each customer may have one

or more salespersons, and each salesperson may have one or more customers?

| A) one-to-one |
|--|
| B) one to many |
| C) many to many |
| D) many to one |
| 5) The following is a valid SET operation. |
| A) Join |
| B) Insert |
| C) Select |
| D) Difference |
| 6) means allowing objects of different types to be considered as example of a higher level set. |
| A) Aggregation |
| B) Specialization |
| C) Generalization |
| D) Decomposition |
| 7) A relation R is said to be in the , if it is in BCNF and there are non-trivial multi valued dependencies. |
| A) 1st NF |
| B) 2nd NF |
| C) 3rd NF |
| D) 4th NF |
| 8) A occurs when a weak entity does not have a candidate key and its instances are indistinguishable without a relationship with another entity. |
| A) Existence dependency |
| B) Identifier dependency |
| C) Referential dependency |
| D) None of the other option listed for this question |
| 9) is / are sample(s) of data model. |
| A) Relational |
| B) Rational |

| C) Entity- relationship |
|---|
| D) None of the other option listed for this question |
| 10) In hierarchical database, |
| A) There is one to many relationship |
| B) A child may have more than one parent |
| C) A parent may have more than one child |
| D) There is no restriction on the number of parents a child may have or the number of children a parent |
| may have |
| 11) The term "inner join" refers to: |
| A) Joins between two tables in the same schema. |
| B) An equality join based on one column from each table. |
| C) A table joined with itself. |
| D) A Cartesian product join. |
| 12) Which type of join is used in this query? |
| SELECT last_name "Name", hire_date "Hire Date", loc "Location" |
| FROM employee, department |
| WHERE employee.deptno = department.deptno. |
| A) Outer join |
| B) Self join |
| C) Equijoin |
| D) Non-equijoin |
| 13) A sales database has two table – SALESPERSON and CUSTOMERS as below: |
| SALESPEOPLE |
| snum NUMBER |
| sname VARCHAR2(10) |
| CUSTOMER |
| |

snum NUMBER

cname VARCHAR2(10)

The management wants to know the mapping of salespersons to their customers without excluding those salespersons that are not currently assigned. What would be the most appropriate condition, which can be applied on the Query to accomplish the above task?

- A) salespeople.snum(+) = customers.snum
- B) salespeople.snum = customers.snum(+)
- C) salespeople.snum = customers.snum
- D) salespeople.snum(+) = customers.snum(+)
- 14) join returns those rows from a table which have no direct match in the other table.
- A) Outer join
- B) inner join
- C) Equijoin
- D) Self join
- 15) To produce a meaningful result set without any Cartesian products, what is the minimum number of conditions that should appear in the WHERE clause of a four table join?
- A) 1
- B) 4
- C) 2
- D) 8

Of the following select a code to print a singly link list in a reverse order. Select a code to print elements of a dequeue

```
a=3,b=3,c=3
a-=b-- --c;
printf (a, b, c);
```

Find a declaration of ADT of a polynomial.

Select code that shows DFS of a graph

Select the statement that appropriately fills the DFS algorithm

```
File *fp1,*fp2;
fp1=fopen ("a","w");
fp2=fopen ("a","w");
```

and operations using these two file pointers . and 4 options based on that

```
int *px;
do{
  *px=f(1);
} while( i<10 && *px<900);
f(int a)
{
  int x= a*50;
  return &x;
}</pre>
```

And four options about value of *px also has options on error conditions

DBMS:

- 1. What are different types of databases
- 2.Difference between RDBMS and File based databases
- 3. Even in RDBMS the data is stored as files , so why go for it
- 4. Three layered architecture
- 5.Can you change physical design
- 6. Write a simple employee and dept table
- 7. Then he asked me to retrieve all employees working in MCA dept(i wrote a nested sub query)
- 8. What is the advantage of nested sub query. will it improve or reduce the performance
- 9. What is inheritance?
- 10. What is a constructor?
- 11.Can a constructor be private?
- 12.Can we OVERRIDE a constructor?
- 13. Are there pointers in java?
- 14. Why is there no pointers in java?
- 15. Identify classes...for bus, car, cycle tricycle?
- 16. What is quality
- 17. What is quality management
- 18. Difference between software engineering and SQM