

Set I

1st Round – GD – Topics –

1. What should India do to improve its winning chances against Australia in the forthcoming tour.
2. America's War on Iraq.
3. Freedom of Press.
4. Latest developments on India-Pakistan peace process.
5. Effect of TV on society.

Each group was given two topics and they had to discuss 5 minutes on each topic.

2nd Round – Written Test – 47 questions in 1 hour. All were technical. No negative marking.

3rd Round – Personal Interview.

All three rounds were shortlisting rounds.

TECHNICAL

Montreal protocol limits the use of _____ ? ans. Ozone depleting substance

Rain drop is spherical due to _____ ? ans. Surface tension

Global warming is due to _____ ? ans. Carbon-di-oxide

One ton of refrigeration is equal to _____ ? ans. 12000 btu/hr

For a laminar flow Reynolds number should be _____ ? ans. Less than 2000

In latent heating a substance _____ ? ans. Changes phase without increase in temperature

Degree of saturation is ratio of _____ ?

A pipe friction test shows that, over the range of speeds used for the test, the non-dimensional friction factor f , varies inversely with Reynolds No. It can be inferred from above that, ans. Pipe should be smooth.

In a rough turbulent flow in a pipe, the friction factor would depend upon? Ans. Pipe diameter and pipe condition.

What is the refrigerant used in vapour absorption cycle?

Pick the odd one out. F12, F22, F11, CO

Expansion in a vapour compression cycle is an _____ ? ans. Isenthalpic process

What is the work of throttling process? Ans. Expansion

What is the material of heat exchanger tubes? Ans. Copper

Tachometer is used to measure _____ ? ans. Speed

Mercury is used in manometer because _____ ?

Check valves are used to ensure _____ ? ans. Unidirectional flow
Anti-freeze agent used is _____ ? Ans. Ethylene glycol
Anemometer can be used to measure _____ ?
Bypass factor of a cooling coil is _____ ?
Aspect ratio of a rectangular duct is the ratio between its _____ ?
The temp that is numerically the same in Fahrenheit & centigrade scales is _____ ?
The loudness of sound depends upon its _____ ?
Dewpoint is the temperature at which water vapor will undergo _____ ? ans.
Condensation
One question using the formula $120fs/p$
In inductance _____ leads _____ ?
Power factor is least in _____ ? a. capacitance b. resistance c. inductance
Barometer is used to measure _____ ?
Identify the odd one out a. DIN b. ISI c. JIS d. IIT
If the NPSH requirements of a pump are not satisfied it will _____ ?
Approach of a cooling tower is the difference between temperatures of _____ ?
A parallel flow heat exchanger will perform better than a counter flow heat exchanger.
State whether this is true or false
The index that normally reflects laminar flow in a tube is _____ ? ans. Reynolds no.
Pressure drop in air duct is influenced by _____ ? ans. shape of the duct
By increasing the intake air temp, efficiency of IC engine will _____ ? ans. decrease
Interview questions

Person 1

Tell about urself (Background specifically)

What do u know about bluestar?

What are its products?

What is the type of air conditioner used in this interview room?

We are going to appoint u as a sales executive for a product which is newly produced by bluestar. But that product is being produced by its competitors. How will u promote the product?

How will u show difference from ur competitors?

Why haven't u continued ur painting art works? (The person had said I used to do paintings once)

Why did u choose mechanical engineering when coimbatore is famous for textiles?

What is ur aim in life?

How will u achieve that?

PERSON 2

Tell about urself.

Why did u choose bluestar?

Tell about ur family.

Whether u are payment or free seat?

What is ur fee structure?

How will u satisfy ur customers?

U are talking a lot. But do u know whether u are listening to u are not? How?
How do u say that u have management skills?
What do u do other than studies?
You are supposed to sell a product in a place which is very new to you.(u don't know that language). There are no dealers also. How will u sell the product?
What is ur ambition?
What is ur weakness?

Set II

there were two sections A and B
section A was mandatory
section B contained 4 parts. u have to solve problems of any two parts
20 questions were asked

- 1.configuration of an UART in serial communication has
 - a.clock signal
 - b.baud rate,stop bit,data length
 - c.both
 - d.none

- 2.deadlock happens when two process waiting for the resources used by each other in this condition
 - a.both process knows that they are waiting for each other
 - b.one process knows that other is waiting
 - c.both a and b
 - d.none

- 3.physical memory location in running program is resolved by
 - a.linker
 - b.compiler
 - c.loader
 - d.none

- 4.task switching is switching between
 - a.process
 - b.threads
 - c.concurrent part in same program
 - d.all

- 5.in 2-pass compiler
 - a.identifier can be used without its declaration
 - b.identifier should be declared before its first use.
 - c.both
 - d.none

6. difference between functional/ordinary SDLC and object-oriented SDLC is

- a. in functional SDLC the development time is more than design time
- b. in object oriented SDLC , design time is more than development time.
- c. both
- d. none

7. which of the following is not a bus-interface for a microprocessor

- a. ISA
- b. AGP
- c. PCI
- d. ICE

8. which of the following statement are true for structure

- a. a structure can contain a pointer to itself.
- b. structure can be compared
- c. both
- d. none

9. which is not defined as codd's rule of RDBMS

- a. comprehensive data sub language rule
- b. view updates.
- c. physical data dependency
- d. integrity dependency

10. encryption means

- a. text to cipher
- b. cipher to text
- c.
- d.

11. in microprocessor over clocking will result in

- a. overheating
- b. malfunctioning
- c.
- d.

12. cache is

- a. ROM
- b. RAM
- c. PROM
- d. EPROM

13. unix os implements two types of pipes ,one is formatted and other is

- a. low level pipes
- b. high level pipes

- c.middle level pipes
- d.none

-----part A (c and unix, 10 questions were asked)-----

```
1.void main()
{
extern int a;
a=10;
printf("%d",sizeof(a));
}
```

will

- a. give linker error- a not defined
- b. print 10
- c. give compiler error

```
2.int a[10];
a[0]=12;
a[12]=17;
printf("%d,%d",a[0],a[12]);
will compiler show any error?
```

- 3.socket() is a
- a.system call
 - b. library function
 - c.both
 - d. none

- 4.the parameter of sizeof operator is
- a.data type
 - b.variable
 - c.both
 - d.none

- 5.the argument of switch command is of type
- a.character
 - b.integer
 - c.both
 - d.all of the above

6.

-----part b(c++ ,10 question)-----

1. difference between pointer and referance

2. inheritance of a class is relationship like

- a. IS A (answer)
- b. HAS A
- c.
- d.

3. In c++ difference between structure and class

- a.
- b.
- c.
- d. access specifier (answer)

4. default parameter implies

5.

guidelines: have a command on these topics

virtual function

multiple inheritance (2 questions)

operator overloading

Set III

Blue star paper has got 2 sections. Firstly you need to clear the aptitude test. It is very easy.

Some of the questions are as follows:

1. Complete the series 1 6 3 7 5 8 7 ?
ans: 9
2. If circle is one octagon is 2 4 6 8 or 1
3. pick the odd one out bend shave chop whittle shear
ans bend.
4. 2 persons start from a pt. and go in opposite directions. After going 3 km they turn left
and walk 4 km .how far r they now? Ans: 10 km
5. There was a question on work something like 2 typists type 2 papers in 4 hrs then in how much
time will 5 typists take or something like that
6. There were 2 questions on proverbs you were supposed to tell the meaning. they were easy.
7. A person runs 6 ft in 1/4 sec. how much it will run in 10 sec. ans 240
8. Find odd one cat ,dog,rabbit,hamster,elk.
9. In a party man & his wife ,and there r 2 son with their wives, and every son has 4
children
in his family .how many person r in party.
10. Unscrambled the word P U T E C A S A H (like that) parachute
11. Add a word in starting of SCAPE and at the end of Grass, you will get two different words
ans:- land grassland landscape

13. All men of this party are republican . mohan is member of this party. mohan is republican is

true or false or camn't say?

14. There r 1200 elephant .some have blue and pink strips.some have pink & green strip. 400 ele.

have only pink strip. how many have only blue strip Ans: . 400

b. can't determined. c.none

15. Day light Day break Day time After clearing aptitude there was technical paper. It had 2 sections.In section A there were 4 subsections out of which 2 were to be attempted.

the

first subsection was on c and unix, second on c++,third on vb/asp/com and fourth on rdbms. In

section B general computer awareness. In section A I did c and c++. Some ques were as follows

Technical

1. void main()

```
{  
extern int a;  
a=10;  
printf("%d",a);  
}
```

1. Give linker error- a not defined ans

2. Print 10

3. Give compiler error

2. int a[10];

```
printf("%d,%d",a[0],a[12]);
```

will compiler show any error?

ans no

3. socket() is a

1. system call ans

2. library function

3. both

4. none

In c++ there were conceptual ques on virtualfunctions , operator overloading etc. in section B

some ques were as follows 1.in microprocessor over clocking will result in

1. overheating

2. malfunctioning ans(check)

3. life would be half
- 4.
4. Cache is
 1. ROM
 2. RAM ans
 3. PRAM
 4. EPRAM
5. How can pass an array to a fns.
 1. desgin(**a)
 2. desgin (*a)
 3. dasgien(&a[0]);
 - 4.
6. Unix has pipelining fromatted &
 - a. high level
 - b. low "
 - c . mid level
 - d. none "
7. Task switching is
 - 1.process switching
 - 2.
 - 3
 - 4.all of the above ans
8. Thread arev ans .light weight process+(c).....?
9. virual fns are defined as
10. which is not bus interface
 - a. pci
 - b. ide
 - c. age
 - d. none
11. switch statement use only
 - a. char
 - b. int
 - c. both
 - d. all of the above
12. Multiple inheritence can not be used in a case.....?
13. What is difference b/w simple SQDL & Object oriented SQDL.
14. Virtual Destructor is used.....?
15. Question on two pass assembler.....?

16. Link list uses
- contiguous memory allocation
 - non contiguous
 - both
 - none
17. Non linear structure a. q & stack
- ans:- b.tree & graph
- tree & stack
 - tree & linklist
18. Encryption is
- ans a. change readable code to cipher text
- none
 -
 -
 -
19. sizeof () operator is used for
- data type
 - data type & variable
- ans c. both
- none
20. deadlock condition
- ans. no process knows exactly that both are waiting for each other.
21. static
- ans:- it's initial value is one --- not true
22. new can be overloaded ----- true
23. virtual function----- ans a and c means no code and forceful inheritance
24. for(;;)
- ans:- infinite loop
- Only three unix questions were there
- socket() is a answer: a) system call
 - two types of pipeline in unix one is formatted and other one is highlevel middle level
- lowlevel none (i don't answer for this question pls check it out) RDBMS
- CAN foreign key have null values??
answer: YES
 - IN RDBMS SORTING IS PERFORMED IN
ANSWER: TEMP

SetIV

1. What would be the output of the following program.

```
#include<stdio.h>
```

```

main()
{
extern int a;
printf("%d",a);
}
int a=20;

```

(a) 20 (b) 0 (c) garbage value (d) error!!

2. What would be the output of the following program.

```

main()
{
int a[5]={2,3};
printf("\n %d %d %d",a[2],a[3],a[4]);
}

```

(a) garbage value (b) 2 3 3 (c) 3 2 2 (d) 0 0 0

3. What would be the output of the following program.

```

main()
{
inti=-3,j=2,k=0,m;
m=++i&&++j||++k;
printf("\n %d %d %d %d",i,j,k,m);
}

```

(a) -2 3 0 1 (b) -3 2 0 1 (c) -2 3 1 1 (d) error

4. What would be the output of the following program.

```

main()
{
int a,b;
a=sumdig(123);
b=sumdig(123);
printf("%d %d",a,b);
}
sumdig(int n)
{
static int s=0;
int d;
if(n!=0)
{
d=n%10;
n=(n-d)/10;
s=s+d;
sumdig(n);
}
else return(s);
}

```

(a) 12 6 (b) 6 12 (c) 3 15 (d) error

5. What would be the output of the following program.

```
#define CUBE(x) (x*x*x)
main()
{
int a,b=3;
a=CUBE(b++);
printf("\n %d %d",a,b);
}
```

(a) 64 4 (b) 27 4 (c) 27 6 (d) 64 6

6. What would be the output of the following program.

```
main()
{
const int x=get();
printf("%d",x);
}
get()
{
return(20);
}
```

(a) 20 (b) garbage value (c) error (d) 0

7. A function has this prototype void fl(int **x),

How will you call this function?

(a) int **a; (b) int a; (c) int *a; (d) int a=5;
fl(a); fl(&a); fl(&a); fl(&&a);

8. point out the error, if any, in the for loop

```
main()
{
int l=1;
for(
{
printf("%d",l++);
if(l>10)
break;
}
}
```

(a) The condition in the for loop is a must (b) The two semicolons should be dropped
(c) The for loop should be replaced by a while loop (d) No error

9. Can the following piece of code be executed?

```
int main(void)
{
```

```

char strA[10]="compile",strB[10];
my_strcpy(strB,strA);
puts(strB);
}
char * my_strcpy(char *destination,char *source)
{
char *p=destination;
while(*source!='\0')
{
*p++=*source++;
}
*p='\0';
return destination;
}

```

- (a) Compilation will only give a warning but will proceed to execute & will display "compile"
(b) The compilation error char *(char *,char *) differs in levels of indirection from 'int()' will occur
(c) Yes & it will print compile on the screen (d) None of the above

10. What would be the output of the following program.

```

#include<stdio.h>
main()
{
char str[5]="fast";
static char *ptr_to_array = str;
printf("%s",ptr_to_array);
}

```

- (a) Compilation will only give a warning but will proceed to execute & will display "fast"
(b) display "fast" on screen (c) will give a compilation error (d) none of the above

11. What would be the output of the following program.

```

main()
{
int num,*p;
num=5;
p=&num;
printf("%d",*p);
}

```

- (a) 6 (b) 5 (c) junk value (d) compilation error

12. What would be the output of the following program.

```

main()
{
int a[3]={2,3,4};
char *p;

```

```
p=a;
p=(char *)((int *)p+1);
printf("%d",p);
}
```

(a) 2 (b) 0 (c) junk value (d) 3

13. What would be the output of the following program.

```
main()
{
int i=10;
fn(i);
printf("%d",i);
}
fn(int i)
{
return ++i;
}
```

(a) 10 (b) 11 (c) 12 (d) Compilation error

14. What will be the value of i & j after the loop is executed?


```
for(i=0,j=0;i<5,j<25;i++,j++)
```

(a) i=4,j= 24 (b) i=24,j= 24 (c) i=25,j= 25 (d) i=5,j=25

15. What would be the output of the following program.

```
main()
{
int i,j;
i=10;
j=sizeof(++i);
printf("%d",i);
}
```

(a) 11 (b) 10 (c) 4 (d) compilation error

16. What would be the output of the following program.

```
main()
{
int i=7;
printf("%d\n",i++*i++);
}
```

(a) 49 (b) 56 (c) 72 (d) compilation error

17. What will the printf print?

```
main()
{
char *p,*f();
p=f();
```

```

printf("f() returns:%s\n",p);
}
char *f()
{
char result[80];
strcpy(result,"anything will do");
return (result);
}

```

- (a) f() returns: anything will do (b) f() returns:
(c) compilation error (d) The printf statement is not going to be executed

18.How many times the following program would print 'Jamboree'?

```

main()
{
printf("\n Jamboree");
main();
}

```

- (a) infinite number of times (b) 32767 times
(c) 65535 times (d) till the stack does not overflow

19.Notice the error in the default statement in the code snippet below.Will it give a compilation error?

```

main()
{
int a=10,j;
j=fn(a);
switch(j)
{
case 30: printf("the value is 30");
break;
case 50: printf("the value is 50");
break;
default:printf("the value is not 30 or 50");
}
}
fn(int a)
{
return (++a);
}

```

- (a) Will display "the value is 30" (b) Will display "The value is not 30 or 50"
(c) Yes a compilation error would happen
(d) No compilation errors but there will be no output on the screen

20.What would be the output of the following program.

```

main()
{

```

```
struct emp
{
char name[20];
int age;
float sal;
};
struct emp e = {"tiger"};
printf("\n %d %f",e.age,e.sal);
}
```

(a) 0 0.000000 (b) Garbage values (c) Error (d) none of the above