# HCL Paper Pattern on 25th September 2008

1) In a murder case there are four suspects P,Q,R,S. Each of them makes a statement. They are p: "I had gone to the theatre with S at the time of the murder". q: "I was playing cards with P at the time of the murder". r: "Q didn't commit the murder". s: "R is not the murderer".

Assuming the only one of the above statement is false and that one of them is the murderer, who is the murderer?

a) P

b) Q

c) R

d) Cann't be concluded

e) S

and: E.) r and s are true as first two statements are contradictory. thus either P or S is murederer. as q is not murderer, he is tellinjg truth that P was with him. hence S is murderer.

2) Mohan earned twice as much as Deep. Yogesh earned rs.3/- more than half as much as deep. If the amounts earned by Mohan,Deep,Yogesh are M,D,Y respectively, Which of the following is the correct ordering of these amounts?

a) M < D < Yb) M < Y < Dc) D < M < Yd) It cann't be determined from the information given e) D < Y < M

ans d)

3) Statistics indicate that men drivers are involved in more accidents than women drivers. Hence it may be concluded that...

a) sufficiently information is not there to conclude anything

b) Men are actually better drivers but drive more frequently

c) Women Certainly drive more cautiously than Men

d) Men chauvinists are wrong about women's abilties.

e) Statistics sometimes present a wrong picture of things

4) What does the hex number E78 correspond to in radix 7?

a) 12455

- b) 14153
- c) 14256
- d) 13541
- e) 13112
- Ans: d

5)Given that A,B,C,D,E each represent one of the digits between 1 and 9 and that the following multiplication holds: A B C D E

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X 4 EDCBA what digit does E represent? a) 4 b) 6 c) 8 d) 7 Ans: c 6) HCL prototyping machine can make 10 copies every 4 seconds. At this rate, How many copies can the machine make in 6 min.? a) 900 b) 600 c) 360 d) 240 e) 150 Ans: a 7) if a=2,b=4,c=5 then a+b c c a+ba) 1 b) 11/30 c) 0 d) -11/30 e) -1 Ans: b 8) Cool  $10^{2}(10^{8}+10^{C}cool = 10^{4}$ a) 2(10)^4 b) 2(10)^6 c) 10^8 d) 2(10)^8 e) 10^10 Ans: b

9) Worker W produces n units in 5 hours. Workers V and W, workers independently but at the same time, produce n units in 2 hours. how long would it take V alone to produce n units?

a) 1 hr 26 min b) 1 hr 53 min c) 2 hr 30 min d) 3 hr 30 min e) 3 hr 20 min Ans: d (e)

11-15 is the reasoning Questions: Occurs and Causes available in placement papers.com Six knights - P,Q,R,S,T and U - assemble for a long journey in two travelling parties. For

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security, each travelling party consists of at least two knights. The two parties travel by separate routes, northern and southern. After one month, the routes of the northern and southern groups converge for a brief time and at that point he knights can, if they wish, rearrange their travelling parties before continuing, again in two parties along separate northern and southern routes. Throughout the entire trip, the composition of travelling parties must be in accord with the following conditions

P and R are deadly enemies and, although they may meet briefly, can never travel together.

p must travel in the same party with s

Q cann't travel by the southern route

U cann't change routes

16) If one of the two parties of knights consists of P and U and two other knights and travels by the southern route, the other members of this party besides P and U must be. a) Q and S

b) Q and T
c) R and S
d) R and T
e) S and T
Ans: e

17) If each of the two parties of knights consists of exactly three members, which of the following is not a possible travelling party and route?

a) P,S,U by the northern route
b) P,S,T by the northern route
c) P,S,T by the southern route
d) P,S,U by the southern route
e) Q,R,T by the southern route
Ans: b

1Cool If one of the two parties of knights consists of U and two other knights and travels by the northern route, the other memnbers of this party besides U must be

- a) P and S
- b) P and T
- c) Q and R
- d) Q and T
- e) R and T
- Ans: c

19) If each of the two parties of knights consists of exactly three members of different pX-Mozilla-Status: 0009by the northern route, then T must travel by the

a) southern route with P and S

- b) southern route with Q and R
- c) southern route with R and U
- d) northern route with Q and R

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e) northern route with R and U Ans: a

20) If, when the two parties of knights encounter one another after a month, exactly one knight changes from one travelling party to the other travelling party, that knight must be a) P

b) Q
c) R
d) S
e) T

Ans: e

HCL PAPER ON 20th SEPTEMBER 2008 Interview Pattern

Section 1:

In this section there are mainly questions based on C language like find the errors in the program and what is the output of the following program. some question i remember are

1) int i=10; printf("%d %d %d",i++,i++,i--); there is one or two more question on increment operator

2) Two question on redirection operator(>>)

3) int i=10; if(1,i++,++i) printf ("The value for i is %d",i);

4) one question on structure and u have to fine the error in the syntax

```
5) int a=10,b=33;
a=a^b;
b=a^b;
a=a^b;
printf("%d %d", a,b);
6) int *a;
int (*b)();
printf("%d %d",sizeof(a),sizeof(b);
7) # define SQR(a) (a*a)
void main()
{
printf("%d", SQR(5));
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```

}

Cool And in another question # define directive is declared in the main() function of the program and u have to predict the output of the program.?

9) what is the time complexity of bubble sort (Ans:  $O(n^2)$ )

10) What is the size of the address bus and data bus in 8086?

11) address of IVT in 8086?

# HCL PAPER ON 20th SEPTEMBER 2008

Interview Pattern

Section 1: In this section there are mainly questions based on C language like find the errors in the program and what is the output of the following program. some question i remember are 1) int i=10; printf("%d %d %d",i++,i++,i--); there is one or two more question on increment operator 2) Two question on redirection operator(>>) 3) int i=10; if(1,i++,++i)printf ("The value for i is %d",i); 4) one question on structure and u have to fine the error in the syntax 5) int a=10.b=33: a=a^b; b=a^b: a=a^b; printf("%d %d", a,b); 6) int \*a; int (\*b)(); printf("%d %d",sizeof(a),sizeof(b); 7) # define SQR(a)  $(a^*a)$ void main() printf("%d", SQR(5)); 8) And in another question # define directive is declared in the main() function of the program and u have to predict the output of the program.? 9) what is the time complexity of bubble sort (Ans:  $O(n^2)$ ) 10) What is the size of the address bus and data bus in 8086? 11) address of IVT in 8086?

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Section II:

 some 6 guys are there A,B,C,D,E,F(say) and u have to adjust in the row. and some statements are there like A & D can't be adjacent E,A have one vacant area in between.. like that and there are 5 questions are based on that?
 this one is tricky .. there are two groups . one is many brothers can mary one sister of other group. and second is many sister can mary one brother of other group and some statements are there like V & U is father of S, X is the only grandmother of S ...like that.. And there are 6 question based on that..
 and rest of questions are purely aptitude & quant based. like there are two questions on coding if MYSORE is code like MEMEME then how TAMILNADU is coded?

Paper Type : General - Interview

HCL PAPER

PATTERN: WRITTEN TECHNICAL HR WRITTEN:

35 Aps question 20 Technical questions Aps was almost logical and one or two sums on quants. (Prepare logical deduction, blood relation, seating arrangements, pbs on ages, percentage, time and work, time and distance)

Technical was based on C, C++, and some questions on networks, os, and ds.

Had section wise cut off and negative marking...

TECHNICAL:

Why HCL? Questions on my area of interest. Difference bet TCP/UDP—and which is better? Whether tcp/udp is reliable? Asked to choose any one like C, C++, Java. I said C++ So, Num>>2(num value given and asked the o/p) A prog and its o/p. What is port.. Socket? Where we use port.. Inheritance and its types Polymorphism

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If extern is used within private what will happen. Types of networks. Extranet? Using static, extern keywords many questions were asked.. My technical round was abt half an hour. But I am not selected. So, I couldn't give u HR questions..

BY, Akash

# **Sample Test Paper**

1. Which of the following involves context switch,

(a) system call(b) priviliged instruction(c) floating point exception(d) all the above(e) none of the above

Ans: (a)

2. In OST, terminal emulation is done in

(a) sessions layer(b) application layer(c) presentation layer(d) transport layer

Ans: (b)

3. For a 25MHz processor , what is the time taken by the instruction which needs 3 clock cycles,

(a)120 nano secs(b)120 micro secs(c)75 nano secs(d)75 micro secs

4. For 1 MB memory, the number of address lines required,

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Ans. (b)

5. Semaphore is used for

(a) synchronization(b) dead-lock avoidence(c) box(d) none

Ans. (a)

6. Which holds true for the following statement

class c: public A, public B

- a) 2 member in class A, B should not have same name
- b) 2 member in class A, C should not have same name
- c) both
- d) none

Ans. (a)

7. Question related to java

8. OLE is used in

a) inter connection in unix

- b) interconnection in WINDOWS
- c) interconnection in WINDOWS NT

9. Convert a given HEX number to OCTAL

10. Macros and function are related in what aspect?

(a)recursion(b)varying no of arguments(c)hypochecking(d)type declaration

11.Preproconia.. does not do which one of the following

(a) macro(b) conditional complication(c) in type checking(d) including load file

Ans. (c)

12. Piggy backing is a technique for

- a) Flow control
- b) Sequence
- c) Acknowledgement
- d) retransmition

Ans. (c)

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

- (a) -128 (b) -255 (c) -127 (d) 0
- 14. There is an employer table with key fields as employer number data in every n'th row are needed for a simple following queries will get required results.

```
(a) select A employee number from employee A , where exists from employee B where A employee no. >= B
```

employee having (count(\*) mod n)=0

(b) select employee number from employe A, employe B where A employe number>=B employ number

group by employee number having(count(\*) mod n=0) (c) both (a) &a

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# HCL TECHNOLOGIES INDIA PRIVATE LIMITED

HCL System Software Sample Test Paper

NOTE : This is a system paper and not application paper

Section 1- General Computer Concepts

1. Piggy backing is a technique for a) Flow control b) Sequence c) Acknowledgement d) retransmition Ans. (c) 2. In OSI, terminal emulation is done in (a) sessions layer (b) application layer (c) presentation layer (d) transport layer Ans: (b) 3.Bit parity check, when performed on a byte, can catch a)odd number of errors b)even number of errors c)any number of errors d)none of the above Ans: (a) 4. In signed magnitude notation what is the minimum value that can be represented with 8 bits (a) -128 (b) -255 (c) -127 (d) 0 Ans: (c) 5. For 1 MB memory, the number of address lines required, (a)11 (b)16 (c)20 (d) 24 Ans. (c) 6.For a 25MHz processor, what is the time taken by Get latest Fresher / Experienced Engineering Jobs at www.123eng.com For More Placement Papers visit <u>www.123eng.com</u>

the instruction which needs 3 clock cycles, (a)120 nano secs (b)120 micro secs (c)75 nano secs (d)75 micro secs Ans: (a) 7. Semaphore is used for (a) synchronization (b) dead-lock avoidence (c) both a and b (d) none Ans. (c) 8. Which of the following involves context switch, (a) system call (b) priviliged instruction (c) floating poitnt exception (d) all the above (e) none of the above Ans: (a) 9. Virtual address are translated to physical address by (a)the process (b)operating system (c)MMU (d)All of the above (e) None of the above

10.convert the hexadecimal number 0xFEDB to the octal (a) 177333 ans: (a)

11. OLE is a mechanism
a)in UNIX for network communication
b)in INTERNET for communication between nodes
c)for communication between processes in a NT system
d)used as a network layer protocol in NT & Windows
systems

12. an internet IP address of a nodea)has to be unique only for the domain of the nodeb)has to be unique in the node's sub-networkc)has to be unique in the country in which the nodeis presentd)none of the above

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13. There is an employee table with key feilds as employer no.data in every n'th row are needed for a sample. Which of the following queries will get required results. a) select A employe no. from employe A, where exists (select (max (emp\_no)))from employe B where A employe no. >= B employe having (count(\*) mod n)=0 b) select employe no. from employe A, employe B where A.employe no.>=B employ no.group by employe no.having(count(\*) mod n)=0) c) both a& b d)none of the above ans: (d) 14. Type duplicates of a row in a table customer with non unique key feild customer no. can use a) delete from costomer where customer no. exists( select distinct customer no. from customer having count) b) delete customer a where customer no. in (select cust no from customer b where a.cust no=b.cust no) and a.rowid>b.rowid c) delete customer a where custermor no. in (select customer no. from customer a, customer b group by a.cust no having (count(\*)>1) and a.rowid>b.rowid); d) none of the above 15.which of the following is a feature of the ANSI C language and not present in Java? a)forward referencing b)variable length argument lists c)volatile modifier d)none of the above ans: (b) section 2 - C Programming 1.which of the following about the following two declarations is true i) int \*F(); ii)int (\*F)(); a)Both are identical b)the first is a correct declaration and second is

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```
wrona
c) the first declaration is a function returning a
pointer to an integer and the second is a pointer
to
а
function returning int
d)Both are different ways of declaring pointer to a
function
ans : (c)
2.what are the values printed by the following
program?
#define dprintf(expr) printf(#expr=%d\n",expr)
main()
{
int x=7;
int v=3:
dprintf(x/y);
}
a)#2=2 b)expr=2 c)x/y=2 d)none
ans (c)
3.which of the following is true of the following
program
main()
{
char *c;
int *ip;
c=(char *)malloc(100);
ip=(int *)c;
free(ip);
}
a) the code functions properly by releasing all the
memory allocated
b)results in compilation error as a pointer of
various
types cannot be equated
c)the program ties to free more memory than
allocated
and results in run time error
d) works well except when the machine runs low on
memory and malloc is unabel to allocate the memory
ans : (d)
```

4.output

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```
main()
{
int I:
char *p;
i=0x89;
p=(char *)i;p++;
printf("%x\n"p);
}
a)0x8c b)0x4566788A c)0x8A d)0x8B e)none
5. which of the following is not an ANSI c language
keyword?
a)volatile b)function c)default d)const e)void
ans; (b)
6.when an array is passed as parameter to a function
,which of the following statement is correct
a)the function can change values in the original
array
b)in c parameters are passed by value. the function
cannot change the original value in the array
c)it results in compilation error. Array cannot be
passed as a parameter to a function
d)results in runtime error when the function tries
to
access the elements in the array
7.the type of the controlling expression of a switch
statement cannot be of the type
a)int b)char c)short d)float e)none
ans (d)
8.value of (3^6)+(a ^a)=?
Ans :value=5
9. x= b>8?b<<3:b>4?b>>1:b;
ans: x=3
10.output:
main()
{
int n=2:
printf("%d %dn"++n,n*n);
a)3,6 b)3,4 c)2,4 d)cannot determine
ans :(b)
```

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```
11.output:
int x=0x65;
main()
{
char x;
printf("%d\n",x);
a)compilation error b)'A' c)65 d)undefined
12.output
main()
{
int a=10:
int b=6;
if(a=3)
b++;
printf("%d %d",a,b++);
a)10,6 b)10,7 c)3,6 d)3,7 e)none
13.main()
{
enum months {jan=1,feb,mar,apr};
months x=jan;
if(x==1)
printf("jan is the first month");
}
a)does not print anything
b)prints : jan is the first month
c)generates compilation error
d)results in runtime error
14.what is the output of the following program?
Main()
{
char *src="hello world";
char dst{100];
strcpy(src,dst);
printf("%s",dst);
}
strcpy(char *dst,char *src)
{
while (*src) *dst++=*src++;
a)"hello world" b)"hello" c)"world" d)NULL
```

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```
e)undefined
15.main()
{
int i=6;
switch(i)
{
default: i+=2;
case 4;i=4;
case 5:i++;
break;
}
printf("%d",i);
}
a)8 b)6 c)5 d)4 e)none
16.main()
{
int x=20;
itn y=10;
swap(x,y);
printf("%d %d",y,x+2);
}
swap(int x,int y)
{
int temp;
temp=x;
x=y;
y=temp;
}
a)10,20 b)20,12 c)22,10 d)10,22 e)none
17.#define INC(x) x++
main()
{
int x=4;
printf("%d",INC(x++));
}
a)4 b)5 c)6 d)compilation error e)runtime
error
18.struct node{
```

```
int count;
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```

char \*word;

```
struct node left:
struct node right;
};
a)incorrect definiton
b)structures cannot refer to other structrues
c)structures can refer to themselves.Hence the
statement is ok
d)structures can refer to maximum of one other
structure
19.what is the size of the following union
union tag{
int a:
float b;
char c;
};
a)2 b)4 c)1 d)7
ans :( b)
20. main()
{
char s[]="hello world";
printf("%15.10s",s);
a)hello,.world...
b).....hello world
c)heloo,.wor.....
d)none of the above
ans: (b)
section C - analysing program segements
1)struct dlink{
int nodeid;
struct dlink *next;
struct dline *prev;
} dlink t;
A pointer to the head of tha linked list is
maintained
as a global variable whose definition is
dlink_t *head;
```

The function remove\_element(dlink\_t\*rp), needs to remove the node pointed to by rp and adjust the head

The first node's prev and the last node's text are

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```
NULL
remove_element (dlink_t *rp)
{
rp->prev->next =rp->next;
rp->next->prev =rp->prev;
if(head == rp)
head =rp->next;
}
which of the following statement is true about the
function remove_element
a)it works when head is the same as rp;
b)it does not work whe rp is the last element on the
list
c)it sets the head of the list correctly
d)it works in all cases
ans:(b)
2.#define NULL 0
char *
index (sp,c)
register char *sp,c;
{
do {
if(*sp==c)
return(sp);
}while (*sp++);
return (NULL);
}
The first argument sp, is a pointer to a C string.
The
second argument c is a character. This function
searches for the character c in the string. If it
is
found
a pointer to that location is returned ,else NULL is
returned
This function works
a)Always
b)always but fails when the first byte contains the
character c
c)works when c is a non NULL character array
d)works only when the character c is found in the
string
```

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```
3.main()
{
printf("%d\n",f(7));
f(x)
{
if(x < = 4)
return x;
return f(--x);
}
a)4
b)5
c)6
d)7
4.on a machine where pointers are 4 bytes long, what
happens when the following code is executed
main()
{
int x=0,*p=0;
x++;p++;
printf("%d and %d\n",p);
}
a) 1 and 1 is printed
b) 1 and 4
c) 4 and 4
d) causes an exception
5.which is correct?
a)strcpy(char *dst,char *src)
{
while (*src)
*dst++=*src++;
}
b) strcpy(char *dst,char *src)
{
while (*dst++=*src++);
}
c) strcpy(char *dst,char *src)
{
while (*src){
*dst=*src;
```

```
dst++;src++;
}
}
d) strcpy(char *dst,char *src)
{
while (*++dst=*++src);
}
6. main()
{
int i=20,*j=&i;
f1(j);
*j+=10;
f2(j);
printf("%d and %d ',i,*j);
}
f1(k)
int *k;
{ *k+=15;}
f2(x)
int *x;
{ int m=*x, *n=&m;
*n+=10;
}
The values printed by the program will be
a)20 and 55
b)20 and 45
c)45 and 45
d)55 and 55
e)35 and 35
ans:(c)
7.int
func(int x)
{
if(x <= 0)
return (1);
return func(x-1)+x;
}
main()
{
printf("%d",func(5));
}
a)12 b)16 c)15 d)11
```

```
8.consider the following fragments of c code in two
files which will be linked together and executed
a.c
int i;
main()
{
i=30;
f1();
printf("%d",i);
}
b.c
static int f1()
{
i+=10;
}
which of the following is true?
a)a.c will fail in compilation phase because f1() is
not declared
b)b.c will fail in compilation because the variable
i.
is not declared
c)will print 30
d)will print 40
d)a & b
9. void
funca(int *k)
{
*k+=20;
}
void
funcb(int *k)
{
int m=*x,*n=\&m;
*n+=10;
}
main()
{
int var=25,;
*varp=&var;
funca(varp)
*varp+=10;
funcb(varp);
printf("%d%d,var,*varp);
}
```

(a) 20,55(b) 35,35(c) 25,25(d)55,55 ans : (d )

```
9. #include <stream.h>
class x{
public :
int a;
x();
};
x::x() \{ a=10; cout << a; \}
class b:public x {
public :
b(); x();
};
b::b() { a=20;cout<<a;}
main()
{
b temp;
}
what will be the output of the following program?
a)10 b)20 c)20 10 d)10 20
```

section 4 - General Aptitude Section

1. In a murder case there are four suspects P,Q,R,S.

Each of them makes a statement . They are

P : I had gone to the theatre with S at the time of the murder

Q: I was playing cards with P at the time of the murder

R: Q did not commit the murder

S: R is not the murdere

```
Assuming that only one of the above statement is false
```

and that one of them is the murderer, who is the murderer?

a)p b)Q c)R d)cannot be concluded e)S

2.Mohan earned twice as much and deep.Yogesh earned

Rs.3/- more than half as much as deep.If the amounts

earned by mohan, deep and yogesh are M,D and y

respectively which of the following is the correct

ordering of these amounts?

a)M<D<Y

B)M<Y<D

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C)D<M<Y

 $\dot{D}$  be determined from the information given e)D < Y < M

3. Statistics indicate that men drivers are involved in

more accidents than women drivers.Hence it may be concluded that

a)sufficient information is not there to conclude anything

b)men are actually better drivers but drive more frequently

c)woment certainly drive more cautiously than men d)men chauvinists are wrong about women's abilities

e)statistics sometimes present a wrong picture of things

4.convert hex number 0xE78 to radix 7 ans : 13541

5.given that A,B,C,D,E represent one of the digits between 1 and 9 and that the following multiplication holds

ABCDE X4=EDCBA Which digit does E represent? a)4 b)6 c)8 d)7 e)insufficient data provided

6.HCL photocopying machine can make 10 copies every 4 seconds. At this rate,how may copies can the machine make in 6 minutes? a)900 b)600 c)360 d)240 e)150 ans : ( a) 7. if a=2 , b=4 ,c=5 then (a+b)/c - c/(a+b)=?

```
Àns : 11/30
```

8.10^2 (10 ^8 +10 ^8)/ 10^4=? Ans : 2(10^6)

9.worker W produces n units in 5 hours.Workers V and W,working independently but at the same time produce n units in 2 hours. How long would it take V alone to produce n units? Ans : 3 hr 20 min

10 . If q#0 and k=(rq/2) - s ,then what is r in terms of k,q ans s? ans : 2(k+s)/q

1.A causes B or C ,but not both
2.F occurs only if B occurs
3. D occurs if B or C occurs
4.E occurs only if C occurs
5.J occurs only if E or F occurs
6.D causes G,H or both
7.H occurs if E occurs
8.G occurs if F occurs

11) if A occurs which of the following may occur?
I. F and 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

12. If B occurs which must occur?
a)D
b)D and G
c)G and H
d)F and G
e)J
13. if J occurs ,which must have occurred?
a)E
b) Either B or C
c)both E & f

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d)B e) Both B & C

14. which may occur as a result of a cause not mentioned?
I.D
II.A
III.F
a) I only
b) II only
c) I & II
d) II & III
e) I , II & III
15. If E occurs which one cannot occur?
a)A
b)F

- D)F
- d)C
- e)J
- Qestions 16-20

Six knights - P,Q,R,S,T and U - assemble for a long journey in two travelling parties. For security, each

travelling party consists of at least two knights The two parties travel by separate routs, northern.

and

southern .After one month ,the routes of the northern

and southern groups converge for a brief time and at that point the knights can if they wish ,rearrange their travelling parties before continuing, again in two parties along separate northern and southern routes. Throughout the entire trip , the composition of travelling parties must be in accord with the following conditions:

P and R are deadly enemies and although they may meet briefly can never

travel together.

P must travel in the same party with S

Q cannot travel by the southern route

U cannot change routes

16. If one of the two parties of knights consists of P

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and U and two other knights and travels by the southern route, the other memebers of this party besides P and U must be

a)Q and S

b)Q and T

c)R and S

d)R and T

e)S and T

17.if each of the two parties of knights consists of exactly three members, which of the following is not a

possible travelling pary and route? a)P,S,U by the northern route b)P,S,T by the northern route c)P,S,T by the southern route d)P,S,U by the southern route e)Q,R,T by the northern route

18.if one of the two parties of knights consisits of U

and two other knights and travels by the northern route, the other members of this party besides U must be

a)P and S b)P and T c)Q and R d)Q and T

e)R and T

19.if each of the two parties of knights consists of exactly three members ,S and U are members of different parties and R travels by the northern route

then T must travel by the a)southern route with P and S b)southern route with Q and R c)southern route with R and U d)northern route with Q and R e)northern route with R and U

20. if when the two parties of knights encounter one another after a month exactly one knight changes from

one travelling party to the other travelling party ,that knight must be

Get latest Fresher / Experienced Engineering Jobs at <u>www.123eng.com</u> For More Placement Papers visit <u>www.123eng.com</u> Page 26 of 214 a)P b)Q c)R d)S e)T

# **HCL Placement Paper**

SECTION ONE

A supplier of animals to zoos has the following animals in stock: three females of L, one female and one male of R, one female and three males of T, and two males of M. conditions: a male and female of same species cannot be placed in the same cage. a male M and male T cannot be placed in the same cage.

1) the supplier can place which of the following combinations of animals together in a cage?

a one r,two t and two M.

b three t and two r.

c four t and one r.

d five females

e five males

2) the maximum number of animals that could possibly be placed in one cage together is

a7b6c8d9e10.

3) If the supplier must place the female r and female t in a cage with three other

animals, which of the following combinations could be used for the addititonal three animals.

1 two males and one female

2 two females and one male

3 three males

a) 1 only

b) 2 only

c) 3 only

d) 2 and 3 only

e) 1 and 2 only

4) If the supplier places exactly 5 of the animals in one cage

together,all of the

following statements must be true except:

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a) If four species are in the cage, the female t is in the cage.

b) if no T is in the cage, the female r is in the cage.

c) the four t's are not all in the cage.

d) if exactly three females, all of different species ar ein the cage two m's are in the cage.

e) If there are four males in the cage, no M is in the cage.

5) assuming that there is exactly one male t in the cage, what

is the maximum number of animals in the cage?

a)4 b)6 c)5 d)7 e)8 ans :d

questions 6 to 9:

a,b,c,d,e,f and g are seven consecutive positive integers,

not necessarily in the same order.

1)b is the middle number

2)d is three less than c

3) the difference between f and a is equal in magnitude and

sign to the difference between e and c.

4) neither f nor c lie between e and g.

6)what is the value of b-f?

a)2 b)1 c)-1 d)-2 e)cannot be determined.

7) which number is the greatest of the seven?

a)f b)c c)g d)cannot be determined e)e.

8) Given that both A nd G are primes, what is the lowest possible value of E?

a)6 b]8 c]9 d]12 e]cannot be determined

9) which of the given classes is redundant?

a)1 b)2 c)3 d)none of the above e)4.

questions 10 to 14:

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 a occurs if f occurs

10) if a occurs, which of the following may occur
I. f and g
II. e and h
III. d
a] I only b]II only c]IIIonly d]I,II and III
e]I&IIIor II&III,but not both.
11) if b occurs,which must occur
a]f and g b]d and g c]g and h d]d e]j

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12)if j occurs, which must have occured

a]e b]either b or c c]both e&f d]b e]both b and c

13) which may occur as a result of a cause not mentioned I]d II]a III]f.

all only bl II only clll&lllonly dl&ll ell,ll&ll

14) if e occurs, which one cannot occur

a]a b]f c]d d]c e]j

15)In a murder case there are four suspectsP,Q,R and S. Each of them makes a statement. they are

P: "i had gone to theatre with S at the time of murder"

Q: "I was playing cards with P at the time of murder"

R: "Q did not commit murder"

S: "R is not the murderer"

Assuming that only one of the above statement is false and that one of them is the murderer, who is the murderer?

a]P b]Q c]R d]cannot be determined e]S

16)Mohan earned twice as much as deep.Yogesh earned rs 3/ more than half as much as deep.If the amounts earned by mohan, deep and yogesh are M,D and Y respectively,which fo the following is the correct ordering of these amounts.

a]M<D<Y b]M<Y<D c]D<M<Y d]It cannot be determined e]D<Y<M.

17)If you present a blue pass, then you may enter the compound. If the above,statement is true,which of the following must be true? I if you do not present a blue pass,then you may not enter the

compound. It if you may enter the compound t

II if you may enter the compound, then you must have presented a blue pass

Illif you may not enter the compound, then you did not present a blue pass.

a]I b]II c]I&II d]III e]I,II&III.

18) what does the hex number E78 correspond to in radix 7? a]12455 b]13541 c]14256 d]14153 e]13112

19) Statistics indicate that men drivers are involved in motre accidents than women drivers. Hence it may be concluded that

a] Men chauvinists are wrong about women's abilities.

b]men are actually better drivers but drive more frequently c]women certainly drive more cautiously than men

d]sufficient information is not there to conclude anything.

e]statistics sometimes present a wrong picture of things.

20) given that A,B,C,Dand E each represent one of the digits

between 1&9,and that the following multiplication holds: ABCDE

\* 4

-----

EDCBA.

what digit does E represent?

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a]4 b]6 c]8 d]7 e]insufficient data provided.

#### SECTION II-UNIX, DOS, WINDOWS

1) which of the following is not a file type under unix a]named pipe b]character special c]link d]symbolic link 2) which of the following information about a regular file is not contained in a unix disk inode? a)the directory it belongs it to b]the size of the file clthe number of links d]the last modification time 3) which of the following is a system call under unix a]fopen[] b]gets[] c]getpid[] d]fprintf[] 4) which unix system call should be used to get a signal after a specified amount of time a]pause() b]alarm() c]stime() d]wait() 5) which of the following about the fork() system call is false in unix a)fork[]returns the child's pid to the parent b)fork[]returns -1 when it fails c)fork[]returns zero to the child d)fork[]returns the parent's pid to the child 6) which of the following cannot return a file descriptor in unix? a]open[] b]create[] c]link[] d]dup[] 7) which of the following system call is used to change the ownership of a file to root in unix? a] chmod[] b] chgrp[] c]chroot d]chown[] 8) which is not a process state in Unix? a)zombie b]sleep c]run d]closed 9) which of the following is not a IPC mechanism in UNIX? a)named pipe b)unnamed pipe c)shared library d)message queues 10) which signal cannot be traped by an application in UNIX a]SIGSEGV b]SIGQUIT c]SIGILL d]SIGKILL 11)DLLs in windows are a)used for linking b]static libraries c]shared libraries dlused for communication. 12)Windows enhanced mode requires a)80286 or above b)80386 or above c)8086 or above d)80486 or above 13)TSRs can be accessed through a]software interrupt b]hardware interrupt clfarcells dlall of the above 14) the SET command of DOS a)assigns MSDOS environment variables

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b)allocates memory in environment c)sets upper memory limit d)none of these 15)XXX.SYS file loaded through CONFIG.SYS file is a a]DOS system boot file b]installable device driver c]DOS executable d]configuration file. 16)In windows the clipboard is used for a]sharing data between applications b]drawing and painitng c]desktop publishing d]none of the above. 17)The symbol used for redirecting output to another program in DOS a]'>' b]'<' c]'|' d]none of the above 18) the basic DOS interupt vector a]0x21 b]0x10 c]0x13 d]0x09 19) the essential property required by an operating system to be a real-time operating system is a]time sharing b] fair scheduling c] preemptable d]re-entrant 20) for a given machine with only 3 physical pages, and page replacement algorithm being LRU (least recently used), find the number of page faults that will occur for the following of virtual page references (assume that no page present in memory to begin with : 1,2,3,2,5,3,2,4,2,1,5. a] 7 b] 8 c] 9 d] none of these. SECTION-III ("C"Language Fundamentals) - - / 1) two variables cannot have the same name if they are a] in the same function b] in the same file c] in the same block d] across two files 2)a static function, say s(), in a file f.c can be invoked from a] all functions in f.c after the definition of s b] all functions in f.c after the declaration of s cl all functions in f.c d] all of the above 3) the values printed by the following program when executed are int a: main() { a=6; f(); } f() { int a=5; printf("%d\n",a++);  $\{ int a=8 \}$ printf("%d\n",a++);

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```
}
}
a] 6and9 b] 5and9 c] 6and8 d] 7and8
4) the values printed by the following'c'program
#define VALUE 1+2
main()
{ printf("%d and %d\n", VALUE/VALUE, VALUE*3);
}
a] 1and9 b] 5and7 c] 1and7 d] 5and9
5) Macros and functions do not differ in the following respects
a) type checking b) vgariable number of arguments c) recursion
d]declaration of local variables
6]what is the value assigned to a and b when the following piece of 'C'
code is executed
a=(10,15);
b= 10,15;
a] 10and10 b] 10and15 c] 15and10 d] 15and15
7) which of the following is not a bit operator
a] ! b] | c] ~ d] ^
8) which is the value assigned to the variable a if b is 7.
a=b>8?<<2:4?b>>1:b;
a] 7 b] 28 c] 3 d] 14
9) the value of the following expression (2^3)+(a^a) when evaluated is
a] 1 b] 2 c] 3 d] insufficient data
10) which one of the following operators has the highest precedence?
a] << b] || c] ++ d] %
11) if a is 10 and b is 5, then the value of the expression a+++-b is
a] 15 b] 16 c] 14 d] 13.
12) which of the following is not a basic data type?
a]char b] char * c] double d] float.
13) consider the following c program
main()
\{ int x=5, y=7, z=6; \}
if(x>y)
if(v < z)
printf("1");
else
printf("2");
if(y>x)
printf("3");
what is printed when this program is executed
a] 1 3 b] 2 3 c] 3 d] 2
14) the declaration of a variable does not result in one of the following
a] knowing the type of the variable
b] knowing the size of the variable
```

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c] knowing the scope of the variable d] allocation of storage space for the variable 15)a goto statement can reference a label a] in another function within the same file b] in another function in a different file c] within the same function d] none of the above 16) the body of the loop of which of the following loop constructs executes at least once a] for construct b] while do construct c] do while construct d] none of the above 17) which of the following can change the flow of execution of a program a] break b] continue c] return d] all of the above 18) the type of the controlling expression of a switch statement cannot be of the type a] int b] char c] short d] float 19)in c parameters are passed by a] value only b] reference only c] name only d] value and reference. 20) assuming a pointer takes up 4 bytes what is the size of the following structure struct x { char a[8]; struct x \*forw; struct x \*back; }; a] 8 b] 10 c] 24 d]16 \_\_\_\_\_ SECTION - IV ("COMPUTER CONCEPTS") \_\_\_\_\_

1. How many bytes does an array A(1:8,2:2,1:5) require for storage if each

location of array is of 24 bits long?

a] 200 b] 480 c] 600 d] 800 e]none of these.

2. For a function to be reentrant which of the following must be true?

a. All var that it uses must be on stack.

b. It should have a single entry point.

c. it should not be recursive.

d. It should not modify itself.

e. both a&d.

3. Stack as a data structure is not a must for recursion- state whether this

is true or false

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a] true. b] false.

4. The avg case time complexity of the lexical analyser is (n is the size of the input string to be analysed)
a.O(log n) b.O(n) c.O(nlogn) d. (n\*\*2) e O(n\*\*3).

5. The lexical analyser can be implemented asa. NFA with empty transitionsb. A NFA without empty transitionsc. A DFAd. a & b

e All the above.

```
questions 6 & 7.
x=1;
a=0; b=1; c=0;
if((x) || (c=a+b)){
b=2;
c=c+b;
}
```

6. The value of c in the above code, assuming strict evaluation is a.0 b.1 c.2 d.3. e. None of the above.

7. Assuming lazy evaluation is a.0 b.1 c.2 d.3 e. None of the above.

8. In the complete binary tree of n nodes, how many nodes have a parent as well as children?
a] [n+1]/2-1 b] [n-1]/2-1 c][n-1]/2+1 d] [n-1]/2 e][n+1]/2

9. Macro expansion is performed in the second pass of a two pass assembler

a. True b. False

10. Which of the following is not a necessary property of ooprogramming?a. data abstraction b. operator & function overloadingc. inheritance d. Polymorphism.

11. Which of the following method definitions will give error in compilation in c++?
i) void class1::method1(int a=10,short b,char \*c)
ii)void class1::method1(int a=10,short b,char \*c=NULL)

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iii)void class1::method1(int a,short b=0, char \*c)a. i b. ii c. all the above d i&iii

12. Which one of the following is true about friendship in c++?a.friendship is transitiveb.friendship is inheritedc.friendship is both transitive & inheritedd.friendship is neither transitive nor inherited.

13. HDLC refers to family of protocols at the a] transport layer b] data link layer c] network layer d] physical layer

14. If four channels are being multiplexed by a time division multiplexor(TDM) then.

a]every second slot in the aggregate is for the same channel b]the slot allocation is independent of the multiplexor c]every fourth time slot in the aggregate is for the same channel d]none of the above.

15. Which of the following stmts, ragarding datagram subnetis false?a] it can handle node failure better than a virtual circuit subnetb] it requires more bits of address information in each packet than a virtual circuit subnet.

c] The packets always reach the destination in correct seq.

d] it can work on both connection oriented and connection less networks.

e] none of the above.

16. What is the networking protocol on NetWare Lans?

a] TCP/IP

b] IPX/SPX

c] ODI

d] none of the above

17. Which of the following is a network management protocol? a] SNMP. b] NNTP c] SMTP d] none of the above.

the number of tuples in the natural join of R and S is a]2 b] 3 c]4 d]5 e]6

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19. The outer joins are used to?

a] join tbles fron multiple data bases

b] To select the difference between tables.

c] join tables without loss of rows.

d] for none of these.

20. Assume a table exam has a column marks. Which of the following queries

will return the second highest mark in the table.

a] select marks from exam where marks <> (select max(marks)from exam) b] select max(marks)-1 from the exam

c] select max(marks)from exam where marks<>(select max(marks) from exam)

d] select max(marks)from exam where marks<(select max(marks)from exam) e] c and d.

\_\_\_\_\_

SECTION - V ("ANALYSING " C" PROGRAM SEGMENTS)

```
_____
1) Consider the following program
main()
\{ int y=7; \}
if(y++>6 \&\& y++!=8 \&\& y++>7)
printf("%d\n",y);
else
printf("%d\n",y);
}
what is printed when this program is executed?
a] 7 b] 8 c] 9 d] 10.
2) consider the following program
main()
\{ int i=4; \}
switch(i) {
case 1: i++;
default: i +=2;
case 2: i++;
break:
case 3: i++;
}
printf("%d\n",i);
what is the value printed when the above program is executed.
a] 5 b] 6 c] 7 d] 8.
3) what is printed when this program is executed?
main()
{
printf("%d\n",f(7));
```

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```
}
f(x)
{
if (x <= 4)
return x:
return f(--x);
}
a] 4 b] 5 c] 6 d] 7.
4) on a machine where pointers are 4 bytes long,
what happens when the following code is executed?
main()
\{ int x = 0, *p = 0; \}
x++; p++;
printf("%d and %d\n",x,p);
}
a] 1and1 are printed b] 1and4 are printed c] 4and4 are printed
d] causes an exception.
5) which of the following is the wrong code for strcpy, that is
used to copy the contents from src to dst
(a) strcpy(char *dst, char *src)
{ while (*src)
*dst++ = *src++;
}
(b) strcpy(char *dst,char *src)
while(*dst++ = *src++);
Similarly some segements for (c) and (d) were given.
the choices for answers were 1] a only 2] a and b only 3] a,b and c
4]all of the above
*********FIVE MORE QUESTIONS ARE THERE IN THIS LAST SECTION,
BUT I DON'T HAVE THEM, IF I COULD GET THEM BY TOMORROW I WILL
_____
**ANSWERS**
```

Section1:

-----

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Dear Murthy! Yaa! you are luck fellow. I got HCL full paper. I am mailing it. The quetions are in order. So you no need to prepare answers and mugging that that quetions. Just you mug that answers which are in order or you write all these answers on the hand compactly while you are going to exam.

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 quetion ->2 marks

-ve marks: -1 Section IV: Analytical Q.20 each quetion -> 2 marks.

-ve marks: -1/4

Murthy from each section I am giving one are to quetions also because for checking whether the same paper or not. And for doubtful answers also I am writing quetions but not writing answers

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

Section-I 1). Piggy backing is a technique for

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

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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 repr esen ted 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 protocall in network and windows system

12) b has to be unique in the sub network

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

a) select A employe no. from employe A, where exists from employe B
where A employe no. >= B employe having (count(\*) mod n)=0
b) select employe no. from employe A, employe B where
A employe no. >= B employ no. grouply employe 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 feild customer no. you can see

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a) delete from costomer where customer no. exists
( select distinct customer no. from customer having count )
b) delete customer a where customer no. in
(select customer b where custermer no. equal to b custemor no. ) and a rowid >
b rowid
c) delete customer a where custermor 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=V==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 li nked 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 = 10x6x60/4 = 900 ans: (a)

7. a=2, b=4, c=5 (a+b)/c - c/(a+b) = 11/30 (ans).

8. 100(10000000+10000000)/10000 = 2x1000000 (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 occured

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

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

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(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 occurs

(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:

# HCL TECHNOLOGIES

Q)Piggy backing is a technique for a) Flow control b) sequence c) Acknowledgement d) retransmition ans: c

Q)The layer in the OST model handles terminal emulation a) session b) application c) presentation d) transport ans: b application

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

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

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

A employe no.>=B employ no.grouply employe no.having(count(\*) mod n=0)

c) both a& b

d) none of the above

Q)Type duplicates of a row in a table customer with non uniform key feild customer no. you can see

a) delete from costomer where customer no. exists

( select distinct customer no. from customer having count )

b) delete customer a where customer no. in

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b rowid c) delete customer a where custermor no. in (select customer no. from customer a, customer b) d) none of the above Q)long int size a) 4 bytes b) 2 bytes c) compiler dependent d) 8 bytes ans: compiler dependent Q)x=2,y=6,z=6X=Y==Z;printf(%d",x) ? Q}what does the hexanumber E78 in radix 7. (a) 12455 (b) 14153 (c) 14256 (d) 13541 (e) 131112 ans: (d) Q) 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. Q). 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) Q). If B occurs which must occur (a) D (b) D and G (c) G and H (d) F and G (e) J ans: (a)

Q). If J occurs which must have occured

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

Q). which may occurs 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)

```
Q). E occurs which one cannot occurs
(a) A (b) F (c) D (d) C (e) J
ans: (b)
```

\* \* \* \* \*

HCL-TECH (MADURAI)

Ordering is changed this time.So don't byheart by a,b,c,d. Byheart the answers. Pls check answer once again

Don't hesitate to answer all. Ever HR knows that Students have this gp.

Ist section of the Question is as such in the placement papers.com

Section II - C Programming

 Which of the following about the following two declaration is true

 int \*F()
 int (\*F)()

Choice :

- a) Both are identical
- b) The first is a correct declaration and the second

is wrong

c) The first declaraion is a function returning a

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pointer to an integer and the second is a pointer to function returning int d) Both are different ways of declarin pointer to a function

Answer : c) The first de...

2. What are the values printed by the following program?

```
#define dprintf(expr) printf(#expr "=%d\n",expr)
```

```
main()
{
int x=7;
int y=3;
dprintf(x/y);
}
```

```
Choice:
a) #2 = 2 b) expr=2 c) x/y=2 d) none
```

```
Answer: c)x/y=2
```

3. Which of the following is true of the following program

```
main()
{
    char *c;
    int *p;
    c =(char *)malloc(100);
    p=(int *)c;
    free(p);
}
```

ans: The code functions properly releasing all the memory allocated

4.output of the following.

main()

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{ int i; char \*p; i=0X89; p=(char \*)i; p++; printf("%x %x\n",p,i); } ans:0X8A 5. which of the following is not a ANSI C language keyword? ans:Function. 6. When an array is passed as parameter to a function, which of the following statement is correct choice: a) The function can change values in the original array b) In C parameters are passed by value. The funciton cannot change the original value in the array c) It results in compilation error when the function tries to access the elements in the array d) Results in a run time error when the funtion tries to access the elements in the array Answer: a) The fu...

7. The type of the controlling expression of a switch statement cannot be of the type

a) int b) char c) short d)float e) none

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Answer : d)float

```
8. What is the value of the expression (3^{6}) + (a^{a})?
a) 3 b) 5 c) 6 d) a+18 e) None
Answer: 5
9. What is the value assigned to the variable X if b
is 7 ?
X = b>8 ? b <<3 : b>4 ? b>>1:b;
a) 7 b) 28 c) 3 d) 14 e) None
ans: 3;
10. Which is the output produced by the following
program
main()
{
int n=2;
printf("%d %d\n", ++n, n*n);
}
a) 3,6 b) 3,4 c) 2,4 d) cannot determine
Answer : b) 3,4
11. What is th output of the following program?
int x = 0x65;
main()
{
char x;
printf("%d\n",x);
}
a) compilation error b) 'A' c) 65 d)
unidentified
12. What is the output of the following program
main()
{
int a=10;
int b=6;
if(a=3)
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```

```
b++:
printf("%d %d\n",a,b++);
}
a) 10,6 b)10,7 c) 3,6 d) 3,7 e) none
Answer : d) 3,7
13. What can be said of the following program?
main()
{
enum Months {JAN =1,FEB,MAR,APR};
Months X = JAN;
if(X==1)
{
printf("Jan is the first month");
}
a) Does not print anything
b) Prints : Jan is the first month
c) Generates compilation error
d) Results in runtime error
Answer: b) Prints : Jan..
14. What is the output of the following program?
main()
{
char *src = "Hello World";
char dst[100];
strcpy(src,dst);
printf("%s",dst);
}
strcpy(char *dst,char *src)
while(*src) *dst++ = *src++;
}
a) "Hello World" b)"Hello" c)"World" d) NULL e)
unidentified
Answer: d) NULL
```

15. What is the output of the following program?

```
main()
{
int I=6;
switch(I)
{ default : I+=2;
case 4: I=4;
case 5: I++;
break;
}
printf("%d",I);
a)8 b)6 c)5 d)4 e)none
Answer : c)5
16. What is the output of the following program?
main()
{
int x=20;
int y=10;
swap(x,y);
printf("%d %d",y,x+2);
}
swap(int x,int y)
{
int temp;
temp =x;
x=y;
y=temp;
}
a)10,20 b) 20,12 c) 22,10 d)10,22 e)none
Answer:d)10,22
17. What is the output of the f
ollowing problem ?
#define INC(X) X++
main()
{
int X=4;
printf("%d",INC(X++));
}
a)4 b)5 c)6 d)compilation error e) runtime error
```

Answer : d) compilation error

```
18. what can be said of the following
```

```
struct Node {
char *word;
int count;
struct Node left;
struct Node right;
}
a) Incorrect definition
b) structures cannot refer to other structure
c) Structures can refer to themselves. Hence the
statement is OK
d) Structures can refer to maximum of one other
structure
Answer :c)
19. What is the size of the following union.
Assume that the size of int =2, size of float =4 and
size of char
=1.
Union Tag{
int a;
flaot b:
char c;
};
a)2 b)4 c)1 d) 7
20) What is the output of the following program? (.
has been used
to
indicate a space)
main()
{
char s[]="Hello,.world";
printf(%15.10s",s);
}
a)Hello,.World...
```

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b)....Hello,.Wor c)Hello,.Wor.... d)None of the above

(1) The combined length of the longer two pieces of rope is 12 metres.
(2) The combined length of the shorter two pieces of rope is 11 metres.

(A) (B) (C) (D) (E)

10) A certain company paid bonuses of Rs. 125 to each of its executive emplyees and Rs 75 to each of its nonexecutive employees. If 100 of the employees were nonexecutive, how many were executive?
1) The company has a total of 120 employees
2) The total amount that the company paid in bonuses to its employees was Rs.10,000

(A) (B) (C) (D) (E)

11. What fraction of his salary did Mr. Johnson put into savings last week ?

 Last week Mr.Johnson put Rs 17 into savings.
 Last week Mr.Johnson put 5% of his salary into savings.

(A) (B) (C) (D) (E)

12. Each M-type memory unit will increase the base memory capacity of a certain computer by 3 megabytes. What is the base memory

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capacity, in megabytes, of the computer ?

1) 2 M-type memory units will increase the computer's base memory capacity by 300%

2) The memory capacity of the computer after 2-M type memory units are added to the base memory capacity, is 1.6 times the memory capacity of the computer after 1 M-type unit is added to the base memory capacity.

(A) (B) (C) (D) (E)

13. What fractional part of the total surface area of cube C is red?

Each of 3 faces of C is exactly 1/2 red
 Each of 3 faces of C is entirely white

(A) (B) (C) (D) (E)

SECTION C

Instructions ALL NUMBER USED ARE REAL NUMBERS FOLLOWING EACH QUESTIONS ARE FIVE POSSIBLE ANSWERS LABELED A).B).C).D)&E).TICK THE BEST CHOICE.

14. How many of the integers between 25 and 45 are even ? (A)21 (B)20 (C)11 (D)10 (E)9

Answer:d)10

15. If taxi fares were Rs 1.00 for the first 1/5 mile and Rs 0.20

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for each 1/5 miles thereafter. The taxi fare for a 3-mile ride was

(A)Rs 1.56 (B)Rs 2.40 (C)RS 3.00 (D)Rs 3.80 (E)Rs 4.20

Answer :d)Rs 3.80

16. A computer routine was developed to generate two numbers(x,y)the first being a random number between 0 and 100

inclusive, and

the second being less than or equal to the square root of the

first.

Each of the following pair satisfies the routine EXCEPT

(A) (99.10) (B) (85.9) (C) (50.7) (D) (1.1) (E) (1.0)

Answer : A) (99.10)

17. A warehouse had a square floor with area 10,000 sq.meters. A rectangular addition was built along one entire side of the warehouse that increased the floor by one-half as much as the original floor. How many meters did the addition extend beyond the original buildings ?

(A)10 (B)20 (C)50 (D)200 (E)500

Answer: c)50

18. A digital wristwatch

## HCL technologies paper { MANIT , bhopal ( 25th -26th july) }

Application software

Two section were there one section is aptitude (35 questions 35 minutes) and other is general technical awareness (25 que-25 min)

Each qus have 1 mark for correct and -1/4 for incorrect answer. General technical awareness is very very simple need not to be send .It was based on c, c++ and computer awareness.

Q1. In a island there are people of two community type 'A' and type 'B'. people of this island can ask question only. Questions asked by type 'A' have correct answer YES and question asked by type 'B' have correct answer 'NO'.

Five question are based on this paragraph.

1) One person asked another person "am I a type of 'B'"? what is type of person who asked question.

a) type 'A'

b) type 'B'

c) either 'A' or 'B'

d) such question can not be asked.

2) person of type 'A' asked to his wife " are we of same type". What is type of his wife?

Three more question were there of same type read this paragraph carefully so that this does not take much time.

Q2 . There are six people A,B,C,D,E,F and five cars .cars are stand in sequence numbered 1 to 5 and each car can be share by two persons only.and conditions are 'A' will share car 'B' will sit alone 'F' will not share car with 'D' and 'E' 'D' will drive car 3rd or 4th car 'E' will drive a car which is behind the car with vacant seat.

Following are the qus based on this para

6) if 'D' are sit on the 3rd car how many different arrengment will be there.

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total 7-8 question asked from this paragraph search this qus. in GRE book. I don't remember the qus. And there ans because this was very tough

Q3

DATA SUFFICIENCY

Direction:Read the following instructions carefully and answer questions 11-15 given below:

Each question below is followed by two numbered facts. You have to determine whether the data given in the statement is sufficient for answering the question. Choose one of the following choices best fitting the question and mark A,B,C,D or E as explained below. (A) if statement 1 alone is sufficient to answer the question, but statement 2 is not sufficient.

(B) If statement 2 alone is sufficient to answer the question, but statement 1 is not sufficient.

(C) If both statements together are needed to answer the question, but neither statement alone is sufficient.

(D) If either statement by itself is sufficient to answer the question.

(E) If enough facts are not available to answer the question.

13. Is X =Y? (1) X-Y=X^2-Y^2 ans:( )

(2) X and Y are greater than 1.

14. Is CAB a code word in language Q?

(1) ABC is the base word.

(2) If c immediately follows B, then C can be moved to the front of the code word to generate another word?

ans:()

15. A dress was initially listed at a price that would have given the store a profit of 20 percent of the wholesale cost. What was the wholesale cost of the dress?

(1) After reducing the asking price by 10 percent, the dress sold for a net profit of 10 dollars.

(2) The dress sold for 50 dollars.

ans:()

16. If X and Y do not equal 0, is X/Y an integer?

(1) X is prime

(2) Y is even ans:()

17. What is the price of a banana?

(a) 14 banana and 35 oranges cost Rs. 84

(b) with a 50% discount on banana, Rs. 12 can buy 4 bananas and 5

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oranges. ans:()

two deadly questions on series.

Some qus on fill in the blanks.

6.A+B=C+D;A+C=B+D ;2A>B+D;2C<B+D; Find the arrangements of the letters like e.g:A>B>C>D> etc and all.

Q.NO.1&2

A FACTORY produces a product (measured in cubic feet) over seven days as per the following schedule:

Day1 Day2 Day3 Day4 Day5 Day6 Day7

 $150\ 180\ 120\ 250\ 160\ 120\ 150$ 

The finished goods are to be transported to the market by a truck having a capacity of 2000 cubic feet. Any finished goods (ready at the end of the day) retained overnight at the factory will incur a storage cost of rs.5 per cubic foot for each night of storage. The hiring cost for the truck is rs.1000 per day.

1. If the total cost of transportation and storage is to be minimized, the truck should operate on (a) 2nd,4th,6thand 7th days (b) only the 7th day (c) 2nd,4th,5th and 7th days (d) only on 4th and 5th days (e) none of these ans:() 2.if the storage cost reduces to re.0.80per cubic foot per night, the truck should operate on (a)2nd,4th,5thand 7th days (b)only the 7th day (c)2nd,4th,5th and 7th days (d)only on 4th and 5th days (e)none of these ans:()

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6.if a+d=b+c,a+e=c+d,2cb+d,then (a) a>b>c>d>e (b) b>a>d>c>e (c) d>b>c>a>e (d) b>c>d>e>a ans:() (e) none of these

Q21. three students appear in a test but no one write there name on answer sheet .and they submitted their sheet to teacher . when teacher distributed their answer sheet . what is probability that no one get their own answer sheet.

HCL Sample Paper

Sample Test Paper

Which of the following involves context switch,
 (a) system call
 (b) priviliged instruction
 (c) floating point exception
 (d) all the above
 (e) none of the above
 Ans: (a)

2. In OST, terminal emulation is done in
(a) sessions layer
(b) application layer
(c) presentation layer
(d) transport layer
Ans: (b)

3. For a 25MHz processor , what is the time taken by the instruction which needs 3 clock cycles,
(a)120 nano secs
(b)120 micro secs
(c)75 nano secs
(d)75 micro secs

4. For 1 MB memory, the number of address lines required,

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5. Semaphore is used for
(a) synchronization
(b) dead-lock avoidence
(c) box
(d) none
Ans. (a)

6. Which holds true for the following statement class c: public A, public Ba) 2 member in class A, B should not have same nameb) 2 member in class A, C should not have same namec) bothd) noneAns. (a)

7. Question related to java

8. OLE is used ina) inter connection in unixb) interconnection in WINDOWSc) interconnection in WINDOWS NT

9. Convert a given HEX number to OCTAL

10. Macros and function are related in what aspect?(a)recursion(b)varying no of arguments(c)hypochecking(d)type declaration

11.Preproconia.. does not do which one of the following(a) macro(b) conditional complication(c) in type checking(d) including load fileAns. (c)

12. Piggy backing is a technique fora) Flow controlb) Sequence

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c) Acknowledgementd) retransmitionAns. (c)

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

(a) -128

(b) -255

(c) -127

(d) 0

14. There is an employer table with key fields as employer number data in every n'th row are needed for a simple following queries will get required results.

(a) select A employee number from employee A , where exists from employee B where A employee no. >= B

employee having (count(\*) mod n)=0

(b) select employee number from employe A, employe B where A employe number>=B employ number

group by employee number  $having(count(*) \mod n=0)$ 

```
(c) both (a) &a
```

HCL TECHNOLOGIES

Ist section of the Question is as such in the placement papers.com

Section II - C Programming

 Which of the following about the following two declaration is true

 int \*F()
 int (\*F)()

Choice :

a) Both are identicalb) The first is a correct declaration and the second is wrongc) The first declaration is a function returning a pointer to an integer and the second is a pointer to function returning intd) Both are different ways of declarin pointer to a function

Answer : c

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2. What are the values printed by the following program?

#define dprint(expr) printf(#expr "=%d\n",expr)

main()
{
int x=7;
int y=3;
dprintf(x/y);
}

Choice: a) #2 = 2 b) expr=2 c) x/y=2 d) none

Answer: c

3. Which of the following is true of the following program

```
main()
{
    char *c;
    int *p;
    c =(char *)malloc(100);
    ip=(int *)c;
    free(ip);
}
```

ans: The code functions properly releasing all the memory allocated

4.output of the following.

```
main()
{
    int i;
    char *p;
    i=0X89;
    p=(char *)i;
    p++;
    printf("%x\n",p);
```

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} ans:0X8A

5.

which of the following is not a ANSI C language keyword?

ans:Function.

6. When an array is passed as parameter to a function, which of the following statement is correct

choice:
a) The function can change values in the original array
b) In C parameters are passed by value. The function cannot change the original value in the array
c) It results in compilation error when the function tries to access the elements in the array
d) Results in a run time error when the function tries to access the elements in the array

Answer: a

7. The type of the controlling statement of a switch statement cannot be of the type

a) int b) char c) short d)float e) none

Answer : d

8. What is the value of the statement  $(3^6) + (a^a)$ ?

a) 3 b) 5 c) 6 d) a+18 e) None

Answer : b

9. What is the value assigned to the variable X if b is 7 ?

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```
X = b>8 ? b <<3 : b>4 ? b>>1:b;
a) 7 b) 28 c) 3 d) 14 e) None
ans: c
10. Which is the output produced by the following
program
main()
{
int n=2;
printf("%d %d\n", ++n, n*n);
}
a) 3,6 b) 3,4 c) 2,4 d) cannot determine
Answer : b
11. What is thoutput of the following program?
int x = 0x65;
main()
{
char x;
printf("%dn",x)
a) compilation error b) 'A' c) 65 d) unidentified
12. What is the output of the following program
main()
{
int a=10;
int b=6;
if(a=3)
b++;
printf("%d %dn",a,b++);
}
a) 10,6 b)10,7 c) 3,6 d) 3,7 e) none
Answer : d
13. What can be said of the following program?
main()
{
enum Months {JAN =1,FEB,MAR,APR};
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```

```
Months X = JAN;
if(X==1)
ł
printf("Jan is the first month");
}
a) Does not print anything
b) Prints : Jan is the first month
c) Generates compilation error
d) Results in runtime error
Answer: b
14. What is the output of the following program?
main()
{
char *src = "Hello World";
char dst[100];
strcpy(src,dst);
printf("%s",dst);
}
strcpy(char *dst,char *src)
while(*src) *dst++ = *src++;
}
```

a) "Hello World" b)"Hello" c)"World" d) NULL e) unidentified

Answer: may be d

15. What is the output of the following program?

```
main()
{
    int l=6;
    switch(l)
    { default : l+=2;
    case 4: l=4;
    case 5: l++;
    break;
    }
    printf("%d",l);
    }
    a)8 b)6 c)5 d)4 e)none
```

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```
16. What is the output of the following program?
main()
{
int x=20;
int y=10;
swap(x,y);
printf("%d %d",y,x+2);
ł
swap(int x,int y)
{
int temp;
temp =x;
x=y;
y=temp;
}
a)10,20 b) 20,12 c) 22,10 d)10,22 e)none
Answer:d
17. What is the output of the following problem ?
#define INC(X) X++
main()
{
int X=4;
printf("%d",INC(X++));
}
```

a)4 b)5 c)6 d) compilation error e) runtime error

Answer : d

18. what can be said of the following

```
struct Node {
    char *word;
    int count;
    struct Node left;
    struct Node right;
}
```

a) Incorrect definitionb) structures cannot refer to other structurec) Structures can refer to themselves. Hence the statement is OKd) Structures can refer to maximum of one other structure

Answer :c

```
19. What is the size of the following union.
Assume that the size of int =2, size of float =4 and
size of char =1.
Union Tag{
int a;
flaot b;
char c;
};
```

a)2 b)4 c)1 d) 7

may be b

```
20) What is the output of the following program? (.
has been used to indicate a
space)
main()
{
char s[]="Hello,.world";
printf(%15.10s",s);
}
```

a)Hello,.World...b)....Hello,.Worc)Hello,.Wor....d)None of the above

may be c

9)(1) The combined length of the longer two pieces of rope is 12 metres.(2) The combined length of the shorter two pieces of rope is 11 metres.

(A) (B) (C) (D) (E)

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10) A certain company paid bonuses of Rs. 125 to each of its executive emplyees
and Rs 75 to each of its nonexecutive employees. If
100 of the employees were
nonexecutive, how many were executive?
1) The company has a total of 120 employees
2) The total amount that the company paid in bonuses to its employees was
Rs.10,000

(A) (B) (C) (D) (E)

11. What fraction of his salary did Mr. Johnson put into savings last week ?

Last week Mr.Johnson put Rs 17 into savings.
 Last week Mr.Johnson put 5% of his salary into savings.

(A) (B) (C) (D) (E)

12. Each M-type memory unit will increase the base memory capacity of a certain computer by 3 megabytes. What is the base memory capacity, in megabytes, of the computer ?

 2 M-type memory units will increase the computer's base memory capacity by 300%

2) The memory capacity of the computer after 2-M type memory units are added tothe base memory capacity, is 1.6 times the memory capacity of the computer after1 M-type unit is added to the base memory capacity.

(A) (B) (C) (D) (E)

13. What fractional part of the total surface area of cube C is red?

Each of 3 faces of C is exactly 1/2 red
 Each of 3 faces of C is entirely white

(A) (B) (C) (D) (E)

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#### SECTION C

Instructions ALL NUMBER USED ARE REAL NUMBERS FOLLOWING EACH QUESTIONS ARE FIVE POSSIBLE ANSWERS LABELED A).B).C).D)&E).TICK THE BEST CHOICE.

14. How many of the integers between 25 and 45 are even ? (A)21 (B)20 (C)11 (D)10 (E)9

Answer:d

15. If taxi fares were Rs 1.00 for the first 1/5 mile and Rs 0.20 for each 1/5 miles thereafter. The taxi fare for a 3-mile ride was

(A)Rs 1.56 (B)Rs 2.40 (C)RS 3.00 (D)Rs 3.80 (E)Rs 4.20

Answer :d

16. A computer routine was developed to generate two numbers (x,y) the first being a random number between 0 and 100 inclusive, and the second being less than or equal to the square root of the first. Each of the following pair satisfies the routine EXCEPT

(A) (99.10) (B) (85.9) (C) (50.7) (D) (1.1) (E) (1.0)

Answer : A

17. A warehouse had a square floor with area 10,000 sq.meters. A rectangular addition was built along one entire side of the warehouse that increased the floor by one-half as much as the original floor. How many meters did the addition extend beyond the original buildings ?

(A)10 (B)20 (C)50 (D)200 (E)500

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Answer: c

18. A digital wristwatch was set accurately at 8.30a.m and then lost 2 secondsevery 5 minutes. What time was indicated on the watch at 6.30 p.m of the sameday if the watch operated continuously that time ?

(A)5:56 B)5:58 (C)6.00 (D)6.23 (E)6.26

Answer :E

19) A 5 litre jug contains 4 litres of a salt water solution that is 15 percent salt. If 1.5 litres of the solution spills out of the jug, and the jug is then filled to capacity with water, approximately what percent of the resulting solution in the jug is salt?

(A)7.5% (B)9.5% (C) 10.5% (D)12% (E)15%

Answer :A

20) A plane travelled K miles in the first 96 miles of flight time. If it

completed the remaining 300 miles of the trip in 1 minute, what was its average

speed in miles per hour for the entire trip?

- (A)
- (B)
- (C)
- (D)

(E)

Answer :(300+k)/97 \* 60

21) A merchant sells an item at a 20 percent discount. but still makes a gross profit of 20 percent of the cost. What percent of cost would be gross profit on the item have been if it had been sold without the discount?

(A)20% (B)40% (C)50% (D)60% (E)66.6%

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Answer :c

22) A millionaire bought a job lot of hats 1/4 of which were brown. The millionaire sold 2/3 of the hats including 4/5 of the brown hats. What fraction of the unsold hats were brown.

(A)1/60 (B)1/15 (C)3/20 (D)3/5 (E)3/4

Answer :c

23) How many integers n greater than and less than 100 are there such that, if the digits of n are reversed, the resulting integer is n+9?

(A)5 (B)6 (C)7 (D)8 (E)9

Answer :D

24) An investor purchased a shares of stock at a certain price. If the stock increased in price Rs 0.25 per share and the total increase for the x shares was Rs 12.50, how many shares of stock had been purchased ?

(A)25 (B)50 (C)75 (D)100 (E)125

Answer :B

25) At a special sale, 5 tickets can be purchased for the price of 3 tickets. If5 tickets are purchased at the sale, the amount saved will be what percent ofthe original price of the 5 tickets?

(A)20% (B)33.3% (C)40% (D)60% (E)66.6%

Answer :c

26) Working independently, Tina can do a certain job in 12 hours. Working independently, Ann can do the same job in 9 hours. If Tina works independently

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at the job for 8 hours and then Ann works independently, how many hours will it take Ann to complete the remainder of the jobs?

(A)2/3 (B)3/4 (C)1 (D)2 (E)3

Answer :E

27) A decorator bought a bolt of d m number of red chips in any one stack ?

(A)7 (B)6 (C)5 (D)4 (E)3

Answer :C

SECTION III - ANALYSIS PROGRAM SEGMENTS 1) Here is the structure declaration of a doubly linked list

struct dlink {
int nodeid;
struct dlink \*next;
struct dlink \*prev;
} dlink\_t;

A pointer of the head of the linked list is maintained as a global variable, whose definition is dlink\_t \*head;

The function remove\_element(dlink\_t \*rp), needs to remove the node pointed to the rp and adjust the head.

The first node's prev and the last node's next are NULL.

```
remove_element(dlink_t *rp)
{
rp->prev->next = rp->next;
```

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```
rp->next->prev = rp->prev;
if( head == rp)
head = rp->next;
```

Which of the following statement is true about the function remove\_element

A) It work when head is the same as rpB) It does not work when rp is the last element on the listc) It sets the head of the list correctlyD) It works in all cases

Answer :B

2) Consider the following function written in c:

```
#define NULL 0
```

```
char *
index(sp,c)
register char *sp,c;
{
   do {
    if(*sp == c)
   return (sp);
   } while (*sp++);
   return NULL;
}
```

The first argument sp, is a pointer to a C string. The second argument, c, is a character. This function scarches for the character c, in the string. If it is found a pointer to that location is returned else NULL is returned. This function works a) Always b) Always, but fails when the first byte contais the character c c) works when c is a non NULL character only d) Works only when the character c is found in the string answer: a

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```
03) What is printed when this program is executed
main()
{
printf ("%dn",f(7));
f(X)
{
if (x <= 4)
return x;
return f(--x);
}
a) 4
b) 5
c) 6
d) 7
answer: a
04) On a machine where pointers are 4 bytes long, what
happens when the
following code is executed.
main()
{
int x=0,*p=0;
x++; p++;
printf ("%d and %dn",x,p);
}
a) 1 and 1 is printed
b) 1 and 4 is printed
c) 4 and 4 is printed
d) causes an exception
05) Which of the following is the correct code for
strcpy, that is
used to copy the contents from src to dest?
a) strcpy (char *dst,char *src)
{
while (*src)
*dst++ = *src++;
}
b) strcpy (char *dst,char *src)
while (*dst++ = *src++)
}
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```

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```
c) strcpy (char *dst,char *src)
{
while(*src)
{ *dst = *src;
dst++; src++;
}
}
d) strcpy(char *dst, char *src)
{
while(*++dst = *++src);
}
answer:b
6) Consider the following program
main()
{
int i=20,*j=&i;
f1(j);
*j+=10;
f2(j);
printf("%d and %d",i,*j);
}
f1(k)
int *k;
{
*k +=15;
}
f2(x)
int *x;
{
int m = x, n = \&m;
*n += 10;
}
The values printed by the program will be
a) 20 and 55
b) 20 and 45
c) 45 and 45
d) 45 and 55
e) 35 and 35
7) what is printed when the following program is
compiled and executed?
```

int

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```
func (int x)
{
    if (x<=0)
    return(1);
    return func(x -1) +x;
    }
    main()
    {
    printf("%d\n",func(5));
    }
    a) 12
    b) 16
    c) 15</pre>
```

d) 11

08) COnsider the following of c code in two files which will be linked together and executed .

```
a.c
```

```
int i;
main()
{
    i = 30;
    f1();
    printf("%d\n",i)
}
b.c
```

```
static int f1()
{
    i+=10;
}
```

which of the following is true ?
a) a.c will fail in compilation phase because f1() is not declared
b) b.c will fail in compilation because the variable i is not declared
c) will print 30
d) will print 40
e) a & b

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```
answer: e
9) Consider the following prg
void funca (int *k)
{
*k += 20
}
void funcb (int *x)
ł
int m = *x, *n = \&m;
*n+=10;
}
main()
{
int var = 25,*varp=&var;
funca(varp);
*varp += 10;
funcb(varp);
printf ("%d and %d\n",var,*varp);
}
The values printed when the above prg is complied and
executed
are:
a) 20 and 55
b) 20 and 45
c) 45 and 55
d) 55 and 55
e) 35 and 35
answer: d
10) consider the following program:
# include
class x {
public:
int a:
x();
};
x::x() \{ a=10; cout \le q \text{ if } 10 \} d ans: min 20 hr 3 e) 30 d) 2 c) 53 1 b)
26 a) units? n produce to alone V take it would long how hours. in units
time, same the at but independently workers W, and Workers 5 produces W
Worker 9) b answer: 10^10 2(10)^8 10^8 2(10)^6 2(10)^4 10^4
10^2(10^8+10^8)="------" 8) -1 -11 0 11 a+b ----="c" - ---- c
then a="20;" 7) 150 240 360 600 900 min.? 6 make machine can copies many
How rate, this At seconds. 4 every 10 prototyping HCL 6) Answer: 78?
represent E does digit what ----- A B C D X holds:
```

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multiplication following that 9 between digits of one each A.B.C.D.E 5)Given answer:d 13112 13541 14256 14153 12455 radix correspond E78 number hex What 04) things picture wrong present sometimes Statistics abilities. women?s about are chauvinists Men than cautiously more drive Certainly Women frequently drivers better actually anything conclude there not is information sufficiently concluded be may Hence drivers. women accidents involved men indicate 03) M Y given from determined cann?t It amounts? these ordering correct Which respectively, M,D,Y Mohan, Deep, Yogesh by earned amounts If deep. as much half rs.3 Yogesh Deep. twice Mohan 2) S Cann?t R Q P murderer? who murderer, them false statement above only Assuming murderer?. ?R s: murder?. commit didn?t ?Q r: time with cards playing was ?I q: theatre gone had p: They statement. makes Each P,Q,R,S. suspects four case murder In 1) Section Aptitude General IV 1020 2010 prg? output will  $\}$  temp; { () main cout< 0 and k = qr -s, then what is r in terms of k,q,s?

a) 2k+s ---q b) 2sk ---q c) 2(k-s) ----q d) 2k+sq ----q e) 2(k+s) ----q

```
answer: e
```

11-15 is the reasoning Questions: Occurs and Causes available in placement papers.com

Six knights - P,Q,R,S,T and U - assemble for a long journey in two travelling parties. For security, each travelling party consists of at least two knights. The two parties travel by separate routes, northern and southern. After one month, the routes of the northern

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and southern groups converge for a brief time and at that point the knights can, if they wish, rearrange their travelling parties before continuing, again in two parties along separate northern and southern routes. Throughout the entire trip, the composition of travelling parties must be in accord with the following conditions

P and R are deadly enemies and, although they may meet briefly, can never travel together. p must travel in the same party with s

Q cann't travel by the southern route

U cann't change routes

16) If one of the two parties of knights consists of P

and U and

two other knights and travels by the southern route,

the other members

of this party besides P and U must be

a) Q and S

- b) Q and T
- c) R and S
- d) R and T
- e) S and T

answer: e

17) If each of the two parties of knights consists of exactly three members, which of the following is not a possible travelling party and route?
a) P,S,U by the northern route
b) P,S,T by the northern route
c) P,S,T by the southern route
d) P,S,U by the southern route

e) Q,R,T by the southern route

ans: b

18) If one of the two parties of knights consists of U and two other

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knights and travels by the northern route, the other memnbers of this party besides U must be a) P and S

- b) P and T
- c) Q and R
- d) Q and T
- e) R and T

answer: c

19) If each of the two parties of knights consists of exactly three members of different parties, and R travels by the northern route, then T must travel by the

a) southern route with P and S

- b) southern route with Q and R
- c) southern route with R and U
- d) northern route with Q and R
- e) northern route with R and U

answer: a

20) If, when the two parties of knights encounter one

another after

a month, exactly one knight changes from one

travelling party to the

other travelling party, that knight must be

- a) P
- b) Q
- c) R
- d) S
- e) T

answer: e

#### HCL TECH interview qp

Technical interview is held for 30 min to 1 hr 20min depending upon the stuff. Concentrated areas are

1) OS Concepts

2) C Programming skill

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3) OOPs concepts 4) Basics of Networking 5) Data structures Only basic QP like 1) What is fragmentation? How do overcome? 2) What is semaphore? 3) What are the IPC Mechanism available? Illustrate with example 4) What is structure and union in c? write the code and explain how they are storing in the memory? 5) They will ask to write one c program ? 6) Explain the data struture (code) for the data structures i) Double linklist ii) Minimum spanning tree iii) BFS and DFS iv) AVL tree v) Reverse the linklist 7) Difference between malloc and calloc? 8) write a prg in macro in c? 9) Write a simple MFC program to create a window? (They aaked me write a prg to create a window) 10) Tell about the existing scheduling algorithm? 11) what are all E.F.Codd rule? 12) what is bit slice processor? 13) what is a deadlock? explain it? 14) what is virtual memory? 15) what is circuit switching and packet switching 16) What is the significance of friend keyword in C++?17) Different types of inheritance? 18) do u want to ask anything from us? HR interview This ranges from 20 min to 45 min. They expecting ur i) Focussing towards the technology ii) Adaptability iii) Family Background iv) Team spirit i) Tell abt yourself? ii) what are all ur hobbies? iii)why did u prefer your area of interest?

iv) why did u wanna be in HCL?

v) why did u choose MCA?

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vi) howz interview is going on?

vii) Some general technical qp from ur area of

interest?

viii) how'll u react if u r assigned in the non area

of interest?

(adaptability)

ix) how're getting information abt the company?

(weightage is given to communciating with the seniors)

x) In which project do u want to work in HCL?

xi) do u want to ask anything from us?

There'll be no HR interview for some shortlisted candidates.

70+ and no current arrear is the criteria.

The shortlisted student should have more than 73%.

Aptitude

Setion I (25 ques 30 mins apttitude type)

1. There were four questions based on the data .

5. Five students has appeared for the test on Calculus. The lowest possible

score was 0, and the highest score was 100.aparna ,rahul rohit,shijit, and

shana.Shahana got 8 more marks than Aparna, Shigit got 2 more marks than aparna, rohit got 3/2 of rohit or 10 more than aaparna.The second highest

score was 89. What were the score of each students.

6.A+B=C+D;A+C=B+D ;2A>B+D;2C<B+D; Find the arrangements of the letters

like

e.g:A>B>C>D> etc and all.

7.MBC=(BE)2; where M,B,C,E represent different numbers What does M represent.

8. There was a question on number series.

Five questions were on data sufficiencies all of them I can^Òt recall the ones

can remember I have written them.

A) The first condition is sufficient and the second condition is not necessary.

B) The second condition is sufficient and the first condition is not necessary

C) Both the conditions are necessary but alone is not sufficient

D) Both the conds. Are necessary and any one alone is sufficient condition.

E) Insufficient conditions

10.X =Y;

a)X2-Y2=0 is the sufficient conditions b)X  $X_{-}$  0 is the sufficient condition

b)X-Y =0 is the sufficient condition

11.28 bananas and 35 orange scost Rs 84.After a deduction of 10 % Rs 12 can

buy 4 bananas and 5 oranges. Find the cost of each items.

12 The distance between two pts is 335 kms.A car starts from a point A towards

B with a speed of 65 km/hr at 8.00 am.Another car started from B towards A at

9.00 am at a speed of 70km/hr.When will they meet each other.

a)11.00 am(ans) b)11.30am c)12.00 pm d)1.00 pm e)10.30 am

A,B,C,D,E are travelling in a car.Three of them are drivers.there is one

couple,B is wife of D and is a Driver. A is the brother of D .Of them only one

lady can drive. A drove for a while followed by A and then by E.

24. Which among of the following pairs are brothers,

a)AD(ans) b)CD c)EA d)BA e)ED

25.Which is the other lady present there? a)B b)A c)D d)C(ans) e)E

Four question were based on the logical reasining.given below: There are six inverted cups below which there are one ball each under each cup.colored by solid colours.-red,orange ,magenta,purple,yellow,green.The arrangements was such that one can tell which ball is under a particular cup.The green ball was under the 5thcup, The purple ball at a number lower than the orange ball.the red ball and magenta ball are kept side by side.

16.Find the arrangement of the balls ans:-----,green,orange (I don^Òt remember the other options but the correct pattern consisits of green and orange at the last)

17. Which ball is under the 6th cup?

21.In a clock how many times does the hands of a clock are at right angle in a day? Ans(44 times)

23.A man said to a woman ^ÓYour brother^Òs son^Òs sister is my wife^Ô What is the relation between the man and the lady?

Those who qualified from section I were shortlisted to sit for the second test on techinal questions. The second test consists of two parts Section I consists of Only Operating system and the Section II consists of only Cand C++ fundamentals

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I got HCL full paper. I am mailing it. The quetions are in order. So you no need to prepare answers and mugging that quetions. Just Jyou mug that answers which are in order or you write all these answers on the hand compactly while you are going to exam.

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 C++,JAVA( only 1 on this) Q.10 each quetion ->2 marks

-ve marks: -1 Section IV: Analytical Q.20 each quetion -> 2 marks.

-ve marks: -1/4

VIJAYA from each section lam giving one are to quetions also because for checking whether the same paper or not. And for doubtful answers also I am writing quetions but not writing answers for these quetions.

## SECTION-I

- 1). Piggy backing is a technique for
- a) Flow control b) sequence c) Acknowledgement d) retransmition

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

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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 protocall in network and windows system12) b has to be unique in the sub network

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

a) select A employe no. from employe A, where exists from employe B
where A employe no. >= B employe having (count(\*) mod n)=0
b) select employe no. from employe A, employe B where
A employe no.>=B employ no.grouply employe 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 feild customer no. you can see

a) delete from costomer where customer no. exists
( select distinct customer no. from customer having count )
b) delete customer a where customer no. in
b rowid
c) delete customer a where custermor no. in
( select customer no. from customer a, customer b )
d) none of the above

d) none of the above

15) c Volatile modifier

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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 = 10x6x60/4 = 900 ans: (a)

7. a=2, b=4, c=5 (a+b)/c - c/(a+b) = 11/30 (ans).

8. 100(10000000+10000000)/10000 = 2x1000000 (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

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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 occured
- a) E (b) either B or C (c) both E & F (d) B (e) both B & C ans: (b)
- 14. which may occurs 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 occurs
- (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:

- a c
- a

HCL SYSTEM SOFTWARE PAPER: 60 qs; 90 min. (4 sections)

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е

NOTE : Please check answers once again.

only this much i got , which is available here in iit-kgp

section 1.

1.which of the following involves context switch,
a) system call b)priviliged instruction
c)floating point exception
d)all the above
e)none of the above
ans: a

2.In OSI, terminal emulation is done in a)semion b)appl.. c)presenta... d)transport ans: b

3...... 25MHz processor , what is the time taken by the instruction which needs 3 clock cycles,a)120 nano secs b)120 micro secsc)75 nano secs d)75 micro secs

4. For 1 MBmemory no of address lines required, a)11 b)16 c)22 d) 24 ans: 16

5. Semafore is used fora) synchronization b0 dead-lock avoidencec)box d) noneans : a

6. class c: public A, public B

a) 2 member in class A,B shouldnot have same name

b) 2 member in class A,C " " " "

c) both

d) none

ans : a

Get latest Fresher / Experienced Engineering Jobs at <u>www.123eng.com</u> For More Placement Papers visit <u>www.123eng.com</u> Page 90 of 214 7. question related to java

8. OLE is used in

a)inter connection in unix b)interconnection in WINDOWS c)interconnection in WINDOWS NT

9.No given in HEX ---- write it in OCTAL

10.macros and function are related in what aspect? a)recursion b)varying no of arguments c)hypochecking d)type declaration

11.preproconia.. does not do one of the following a)macro ..... b)conditional complicitation c)in type checking d)including load file

ans: c

SECTION B

1.enum day = { jan = 1 ,feb=4, april, may} what is the value of may? a)4 b)5 c)6 d)11 e)none of the above

```
2.main
{
int x,j,k;
j=k=6;x=2; ans x=1
x=j*k;
printf("%d", x);
```

3. fn f(x)

```
{ if(x<=0)
return; ans fn(5) ....?
else f(x-1)+x;
```

```
4. i=20,k=0;
for(j=1;j<i;j=1+4^{*}(i/j))
{
k+=j<10?4:3;
}
printf("%d", k); ans k=4
5. int i =10
main()
{
int i =20,n;
for(n=0;n<=i;)
{
int i=10
i++;
}
printf("%d", i); ans i=20
6. int x=5;
y = x \& y
(MULTIPLE CHOICE QS)
ans : c
7. Y=10;
if( Y++>9 && Y++!=10 && Y++>10)
printf("..... Y);
else printf(""....)
ans : 13
8. f=(x>y)?x:y
a) f points to max of x and y
b) f points to min of x and y
c)error
d) .....
ans : a
```

}

Get latest Fresher / Experienced Engineering Jobs at <u>www.123eng.com</u> For More Placement Papers visit <u>www.123eng.com</u> Page 92 of 214 9. if x is even, then

(x%2)=0 x &1 !=1 x! ( some stuff is there)

a)only two are correctb) three are correctc), d) ....

ans : all are correct

10. which of the function operator cannot be over loaded

a) <= b)?: c)== d)\*

ans: b and d

```
SECTION.C (PRG SKILLS)
(1) STRUCT DOUBLELIST
{ DOUBLE CLINKED
INT DET: LIST VOID
STRUCT PREVIOUS; BE GIVEN AND A PROCEDURE TO DELETE
STRUCT NEW; AN ELEMENT WILL BE GIVEN
DELETE(STRUCT NODE)
{
NODE-PREV-NEXT NODE-NEXT;
NODE-NEXT-PREV NODE-PREV;
IF(NODE==HEAD)
NODE
}
IN WHAT CASE THE PREV WAS
(A) ALL CASES
(B) IT DOES NOT WORK FOR LAST ELEMENT
(C) IT DOES NOT WORK FOR-----
(2) SIMILAR TYPE QUESTION
ANS: ALL DON'T WORK FOR NON NULL VALUE
```

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```
(3) VOID FUNCTION(INT KK)
KK+=20;
}
VOID FUNCTION (INT K)
INT MM,N=&M
KN = K
KN+-=10;
}
SECTION D
(1) a=2,b=3,c=6 c/(a+b)-(a+b)/c=?
(2) no.rep in hexadecimal, write it in radiv 7
(3) A B C D E
* 4
----- find E ANS: 13
EDCBA
_____
(4) GRE-MODEL TEST-1, SECTION-6(19-22)
(5) M HAS DOUBLE AMOUNT AS D, Y HAS RS. 3 MORE THAN HALF OF
AMOUNT OF D
THE ORDERING A,B,C M C D C Y
ANS:DATA INSUFFICIENT D C M C Y
(6) IN STASTIC MEN CAUSE MORE ACCIDENTS THEN ONE CONCLUSION
(A) MEN DRIVE MORE THAN ONCE
(B) STASTICS GIVE WRONG INFORMATION
(C) WOMEN ARE CAUTION THAN ME ANS; C(VERIFY)
(D)----ETC
(7) P,Q,R,S,T,U -SECURING GRANT;TWO TOURIST PARTIES AND THEN
TWO
SECURITY
GAURDS SHOULD GO WITH EACH PARTY
```

P AND R-ARE ENEMIES, Q DOES NOT GO SOUTH P&S-ARE WILLING TO BE TOGETHER

THE TWO PARTIES MAY GO SOUTH&NORTH RESPECTIVELY AT ONE POINT EACH MAY PASS EACH OTHER THEN GAURDS CAN EXCHANGE 6 Q BASED ON THIS (8)pq-r/s =2 what is q inference a,n&d

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(a) a can do n units of work in strs,a&b can do n units of work in 2 hrs in how many hrs n units of work ans:3 hr 30 min p = (2s+r)/q

```
main()
{
  int var=25,varp;
  varp=&var;
  varp p = 10;
  fnc(varp)
  printf("%d%d,var,varp);
  }
  (a) 20,55(b) 35,35(c) 25,25(d)55,55
  [ c++,c,dbms interview]
  [fundamentals]
  this is new paper
```

application -software

```
part-1:
28-questions
(5)ingless ans:RDMS
(1)bit program-ans d
(2)c ans
(3)+ 0 ans
(4)00p--ans linking
(5)------
(6)------
(9)25--45 even no. ans--10
(10) >10 <100 ---ans=n+9
```

# HCL SYSTEM SOFTWARE PAPER: 60 qs; 90 min. (4 sections)

Section A

1.which of the following involves context switch,a) system call b)priviliged instruction c)floating point exception d)all the above e)none of the above ans: a2.In OSI, terminal emulation is done in

a)semion b)appl.. c)presenta d)transport ans: b

3...... 25MHz processor , what is the time taken by the instruction which needs 3 clock cycles,

a)120 nano secs b)120 micro secs c)75 nano secs d)75 micro secs

4. For 1 MBmemory no of address lines required, a)11 b)16 c)22 d) 24 ans: 16

5. Semafore is used for a) synchronization b0 dead-lock avoidence c)box d) none ans : a

6. class c: public A, public B
a) 2 member in class A,B shouldnot have same name b) 2 member in class A,C " " " " c) both d) none
ans : a

7. question related to java

8. OLE is used in a)inter connection in unix b)interconnection in WINDOWS c)interconnection in WINDOWS NT

9.No given in HEX ---- write it in OCTAL

10.macros and function are related in what aspect? a)recursion b)varying no of arguments c)hypochecking d)type declaration

11.preproconia.. does not do one of the following a)macro ..... b)conditional complication c)in type checking d)including load file ans: c

SECTION B

1.enum day = { jan = 1 ,feb=4, april, may} what is the value of may? a)4 b)5 c)6 d)11 e)none of the above

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2.main { int x,j,k; j=k=6;x=2; ans x=1 x=j\*k; printf("%d", x);

3. fn f(x) { if(x<=0) return; ans fn(5) ....? else f(x-1)+x; }

4. i=20,k=0; for(j=1;j<i;j=1+4\*(i/j)) {k+=j<10?4:3; } printf("%d", k); ans k=4

5. int i =10 main() { int i =20,n; for(n=0;n<=i;) { int i=10 i++; } printf("%d", i); ans i=20

6. int x=5; y= x&y ( MULTIPLE CHOICE QS) ans : c

7. Y=10; if( Y++>9 && Y++!=10 && Y++>10) printf("...... Y); else printf("".... ) ans : 13

8. f=(x>y)?x:ya) f points to max of x and y b) f points to min of x and y c)error d) ......

ans : a

9. if x is even, then  $(x\%2)=0 \times \&1 !=1 > x!$  (some stuff is there) a)only two are correct b) three are correct c), d) ....

ans : all are correct

10. which of the function operator cannot be over loaded a) <= b)?: c)== d)\*

ans: b and d

SECTION.C (PRG SKILLS)

(1) STRUCT DOUBLELIST { DOUBLE CLINKED INT DET; LIST VOID STRUCT PREVIOUS; BE GIVEN AND A PROCEDURE TO DELETE STRUCT NEW; AN ELEMENT WILL BE GIVEN } DELETE(STRUCT NODE) { NODE-PREV-NEXT NODE-NEXT; NODE-NEXT-PREV NODE-PREV; IF(NODE==HEAD) NODE } IN WHAT CASE THE PREV WAS

(A) ALL CASES (B) IT DOES NOT WORK FOR LAST ELEMENT (C) IT DOES NOT WORK FOR-----

(2) SIMILAR TYPE QUESTION ANS: ALL DON'T WORK FOR NON NULL VALUE

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(3) VOID FUNCTION(INT KK) { KK+=20; } VOID FUNCTION (INT K) INT MM,N=&M KN = K KN+-=10; }

SECTION D

(1) a=2,b=3,c=6 c/(a+b)-(a+b)/c=?

(2) no.rep in hexadecimal, write it in radiv 7

(3) A B C D E \* 4 ----- find E

ANS: 13 E D C B A -----

(4) GRE-MODEL TEST-1, SECTION-6(19-22)

(5) M HAS DOUBLE AMOUNT AS D, Y HAS RS. 3 MORE THAN HALF OF AMOUNT OF D THE ORDERING A,B,C M C D C Y ANS:DATA INSUFFICIENT D C M C Y

(6)IN STASTIC MEN CAUSE MORE ACCIDENTS THEN ONE CONCLUSION (A) MEN DRIVE MORE THAN ONCE (B) STASTICS GIVE WRONG INFORMATION (C) WOMEN ARE CAUTION THAN ME ANS; C(VERIFY) (D)-----ETC

(7) P,Q,R,S,T,U -SECURING GRANT;TWO TOURIST PARTIES AND THEN TWO SECURITY GAURDS SHOULD GO WITH EACH PARTY P AND R-ARE ENEMIES, Q DOES NOT GO SOUTH P&S-ARE WILLING TO BE TOGETHER THE TWO PARTIES MAY GO SOUTH&NORTH RESPECTIVELY AT ONE POINT EACH MAY PASS EACH OTHER THEN GAURDS CAN EXCHANGE 6 Q BASED ON THIS

(8)pq-r/s =2 what is q inference a,n&d
(a) a can do n units of work in strs,a&b can do n units of work in 2 hrs in how many hrs n units of work ans:3 hr 30 min p = (2s+r)/q \_\_\_\_\_ main() { int var=25,varp; varp=&var; varp p = 10; fnc(varp) printf("%d%d,var,varp); }
(a) 20,55(b) 35,35(c) 25,25(d)55,55

[c++,c,dbms interview] [fundamentals] application -software

part-1: 28-questions

(5) ingless ans: RDMS

(1)bit program-ans d(2)c ans

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(3)+ 0 ans
(4)00p--ans linking
(5)----(6)----(9)25--45 even no. ans--10
(10) 10 <100 ---ans=n+9</li>
three. I have answers for Q/A paper. For Q/C you should try for answers.

**IIT Roorkee** 

1.8 65 ....

The logic behind this question was that the sum of the digits were 8 11 14 17 20 .. the anwer was the number that contained 23 as the sum check for the number.

2.(x-a)(x-b)(x-c)....(x-z)=? ans. none of these

3.unscramble the word.. the word is parachute

4.supply a four letterd word before the following words

code,box,haste,.....

5.(be)2=mpb ans...m=3

6.a figure was given find the number of four sided figure ans.25(check)7.2 questions were on passage...u would be asked to order them to make out sense.one was of lizard another was regarding the russian politics.

8.repeated question......(truck) data would be provided... check out in the papers of the previous years papers(3 questions on these)

9. XRT computers...passage..

that was very simple u can easily do that.(3 questions).

10.3 ladies 2 men 4 children 3 sections in hall.....(passage)

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(3 questions) u can easily do this as well

12. two questions on data sufficiency.1.find out the whole sale pricea.a discount of 10%was given to get the profit of 10%.b.the selling price was 50 dollars

2. commissioned employee......(i don't remember that exactly).

## HCL (or) HCL Perot Systems (HPS) (or) HCL-CISCO

section 1

In this section there are mainly questions based on C language like find the errors in the program and what is the output of the following program. some question i remember are 1) int i=10; printf("%d %d %d",i++,i++,i--); there is one or two more question on increment operator 2) Two question on redirection operator(>>) 3) int i=10; if(1,i++,++i) printf("The value for i is %d",i);

```
4) one question on structure and u have to fine the error in the syntax
5) int a=10,b=33;
a=a^b;
b=a^b;
a=a^b;
printf("%d %d", a,b);
6) int *a;
int (*b)();
printf("%d %d",sizeof(a),sizeof(b);
7) # define SQR(a) (a*a)
void main()
{
printf("%d", SQR(5));
```

```
}
```

8) And in another question # define directive is declared in the main() function of the program and u have to predict the output of the program.?

9) what is the time complexity of bubble sort (Ans: O(n^2))10) what is the preorder traversal of the following tree

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some tree is given (this is not the actual tree given in the paper only idea) A

/\ B C /\ D E /\ F G 11) x=2,y=6,z=6 x=y==z; printf(%d",x) 12) What is the size of the address bus and data bus in 8086? 13) address of IVT in 8086?

Section II:

1) some 6 guys are there A,B,C,D,E,F(say) and u have to adjust in the row.

and some statements are there like A & D can't be adjacent

E,A have one vacant area in between.. like that and there are 5 questions are based on that? 2) this one is tricky .. there are two groups . one is many brothers can mary one sister of other group. and second is many sister can mary one brother of other group and some statements are there like V & U is father of S, X is the only grandmother of S ...like that..

And there are 6 question based on that..

3) and rest of questions are purely aptitude & quant based.

like there are two questions on coding if MYSORE is code like MEMEME then how TAMILNADU is coded?

HCL (or) HCL Perot Systems (HPS) (or) HCL-CISCO

Section II - C Programming

1. Which of the following about the following two declaration is true

i ) int \*F()

ii) int (\*F)()

Choice :

a) Both are identical

b) The first is a correct declaration and the second is wrong

c) The first declaraion is a function returning a pointer to an

integer

and

the

second is a pointer to function returning int

d) Both are different ways of declarin pointer to a function

Answer : c) The first de...

2. What are the values printed by the following program? #define dprint(expr) printf(#expr "=%d\n",expr)

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```
main()
{
int x=7;
int y=3;
dprintf(x/y);
}
Choice:
a) #2 = 2 b) expr=2 c) x/y=2 d) none
Answer: c)x/y=2
3. Which of the following is true of the following program
main()
{
char *c:
int *p;
c = (char *)malloc(100);
ip=(int *)c;
free(ip);
}
ans: The code functions properly releasing all the memory allocated
4.output of the following.
main()
{
int i:
char *p;
i=0X89;
p=(char *)i;
p++;
printf("%x\n",p);
}
ans:0X8A
5.which of the following is not a ANSI C language keyword?
ans:Function.
6. When an array is passed as parameter to a function, which of the
following
statement is correct
choice:
a) The function can change values in the original array
b) In C parameters are passed by value. The funciton cannot change the
original
value in the array
c) It results in compilation error when the function tries to access
the
elements in the array
d) Results in a run time error when the funtion tries to access the
elements
in
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```

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```
the array
Answer: a) The fu...
7. The type of the controlling expression of a switch statement
cannot
be of
the type
a) int b) char c) short d)float e) none
Answer : d)float
8. What is the value of the expression (3^{6}) + (a^{a})?
a) 3 b) 5 c) 6 d) a+18 e) None
Answer: 5
9. What is the value assigned to the variable X if b is 7?
X = b > 8 ? b <<3 : b>4 ? b>>1:b;
a) 7 b) 28 c) 3 d) 14 e) None
ans: 3;
10. Which is the output produced by the following program
main()
{
int n=2;
printf("%d %d\n", ++n, n*n);
a) 3,6 b) 3,4 c) 2,4 d) cannot determine
Answer : b) 3,4
11. What is thoutput of the following program?
int x = 0x65;
main()
{
char x:
printf("%dn",x)
a) compilation error b) 'A' c) 65 d) unidentified
12. What is the output of the following program
main()
{
int a=10;
int b=6;
if(a=3)
b++;
printf("%d %dn",a,b++);
}
a) 10,6 b)10,7 c) 3,6 d) 3,7 e) none
Answer : d) 3,7
13. What can be said of the following program?
main()
{
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```

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## Page 103 of 214

```
enum Months {JAN =1,FEB,MAR,APR};
Months X = JAN;
if(X==1)
{
printf("Jan is the first month");
}
}
a) Does not print anything
b) Prints : Jan is the first month
c) Generates compilation error
d) Results in runtime error
Answer: b) Prints : Jan..
14. What is the output of the following program?
main()
{
char *src = "Hello World";
char dst[100];
strcpy(src,dst);
printf("%s",dst);
}
strcpy(char *dst,char *src)
while(*src) *dst++ = *src++;
a) "Hello World" b)"Hello" c)"World" d) NULL e) unidentified
Answer: d) NULL
15. What is the output of the following program?
```

```
main()
{
    int l=6;
    switch(l)
    { default : l+=2;
    case 4: l=4;
    case 5: l++;
    break;
    }
    printf("%d",l);
    }
    a)8 b)6 c)5 d)4 e)none
```

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```
Answer : c)5
```

```
16. What is the output of the following program?
main()
{
int x=20;
int y=10;
swap(x,y);
printf("%d %d",y,x+2);
ł
swap(int x,int y)
int temp;
temp =x;
x=y;
y=temp;
}
a)10,20 b) 20,12 c) 22,10 d)10,22 e)none
Answer:d)10,22
17. What is the output of the following problem ?
#define INC(X) X++
main()
{
int X=4;
printf("%d",INC(X++));
}
```

a)4 b)5 c)6 d)compilation error e) runtime error

Answer : d) compilation error

18. what can be said of the following

```
struct Node {
    char *word;
    int count;
    struct Node left;
    struct Node right;
}
```

a) Incorrect definition

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b) structures cannot refer to other structure

c) Structures can refer to themselves. Hence the statement is OK

d) Structures can refer to maximum of one other structure

Answer :c)

19. What is the size of the following union.
Assume that the size of int =2, size of float =4 and size of char =1.
Union Tag{
int a;
flaot b;
char c;
};

a)2 b)4 c)1 d) 7

20) What is the output of the following program? (. has been used to indicate a space) main() { char s[]="Hello,.world"; printf(%15.10s",s); }

a)Hello,.World... b)....Hello,.Wor c)Hello,.Wor.... d)None of the above

## SECTION III - ANALYSIS PROGRAM SEGMENTS

1) Here is the structure declaration of a doubly linked list

struct dlink {
int nodeid;
struct dlink \*next;
struct dlink \*prev;
} dlink\_t;

A pointer of the head of the linked list is maintained as a global variable,

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whose definition is dlink\_t \*head;

The function remove\_element(dlink\_t \*rp), needs to remove the node pointed to the rp and adjust the head.

The first node's prev and the last node's next are NULL.

```
remove_element(dlink_t *rp)
{
rp->prev->next = rp->next;
rp->next->prev = rp->prev;
if( head == rp)
head = rp->next;
```

Which of the following statement is true about the fution remove\_element

A) It work when head is the same as rpB) It does not work when rp is the last element on the listc) It sets the head of the list correctlyD) It works in all cases

Answer :B) It does...

2) Consider the following function written in c:

```
#define NULL 0
```

```
char *
index(sp,c)
register char *sp,c;
{
    do {
        if(*sp == c)
        return (sp);
    } while (*sp++);
    return NULL;
}
```

The first argument sp, is a pointer to a C string. The second argument, c, is a character. This function scarches for the character c, in the string. If it is found a pointer to that location is returned else NULL is returned.

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This function works a) Always b) Always, but fails when the first byte contais the character c c) works when c is a non NULL character only d) Works only when the character c is found in the string ans: a 03) What is printed when this program is executed main() { printf ("%d\n",f(7)); ł f(X){ if  $(x \le 4)$ return x; return f(--x); } a) 4 b) 5 c) 6 d) 7 ans: a 04) On a machine where pointers are 4 bytes long, what happens when the following code is executed. main() { int x=0,\*p=0; x++; p++; printf ("%d and %dn",x,p); } a) 1 and 1 is printed b) 1 and 4 is printed c) 4 and 4 is printed d) causes an exception 05) Which of the following is the correct code for strcpy, that is used to copy the contents from src to dest? a) strcpy (char \*dst,char \*src) { while (\*src) Get latest Fresher / Experienced Engineering Jobs at www.123eng.com

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```
*dst++ = *src++;
}
b) strcpy (char *dst,char *src)
while(*dst++ = *src++)
}
c) strcpy (char *dst,char *src)
{
while(*src)
{ *dst = *src;
dst++; src++;
}
}
d) strcpy(char *dst, char *src)
{
while(*++dst = *++src);
}
ans:b
6) Consider the following program
main()
{
int i=20,*j=\&i;
f1(j);
*j+=10;
f2(j);
printf("%d and %d",i,*j);
}
f1(k)
int *k;
{
*k +=15;
}
f2(x)
int *x;
{
int m = x, n = \&m;
*n += 10;
}
```

The values printed by the program will be a) 20 and 55 b) 20 and 45 c) 45 and 45

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d) 45 and 55e) 35 and 35

7) what is printed when the following program is compiled and executed?

```
int
func (int x)
{
    f(x<=0)
    return(1);
    return func(x -1) +x;
    }
    main()
    {
    printf("%d\n",func(5));
    }
</pre>
```

a) 12b) 16c) 15

d) 11

08) COnsider the following of c code in two files which will be linked together and executed .

a.c

int i; main()
{
 i = 30;
 f1();
 printf("

# SECTION III - ANALYSIS PROGRAM SEGMENTS

1) Here is the structure declaration of a doubly linked list

struct dlink {
int nodeid;

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struct dlink \*next; struct dlink \*prev; } dlink\_t;

A pointer of the head of the linked list is maintained as a global variable, whose definition is dlink\_t \*head;

The function remove\_element(dlink\_t \*rp), needs to remove the node pointed to the rp and adjust the head.

The first node's prev and the last node's next are NULL.

```
remove_element(dlink_t *rp)
{
rp-prev-next = rp-next;
rp-next-prev = rp-prev;
if( head == rp)
head = rp-next;
```

Which of the following statement is true about the fution remove\_element

A) It work when head is the same as rpB) It does not work when rp is the last element on the listc) It sets the head of the list correctlyD) It works in all cases

Answer :B) It does...

2) Consider the following function written in c:

```
#define NULL 0
```

```
char *
index(sp,c)
register char *sp,c;
{
    do {
    if(*sp == c)
    return (sp);
    } while (*sp++);
```

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}

```
The first argument sp, is a pointer to a C string. The second
argument, c, is a character. This function scarches for the
character
c, in the string. If it is found a pointer to that location is
returned
else NULL is returned.
This function works
a) Always
b) Always, but fails when the first byte contais the character
с
c) works when c is a non NULL character only
d) Works only when the character c is found in the string
ans: a
03) What is printed when this program is executed
main()
{
printf ("%d\n",f(7));
ł
f(X)
{
if (x
<= 4)
return x;
return f(--x);
}
a) 4
b) 5
c) 6
d) 7
ans: a
04) On a machine where pointers are 4 bytes long, what happens
when the
following code is executed.
main()
{
int x=0,*p=0;
x++; p++;
printf ("%d and %dn",x,p);
}
```

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```
a) 1 and 1 is printed
b) 1 and 4 is printed
c) 4 and 4 is printed
d) causes an exception
05) Which of the following is the correct code for strcpy, that
is
used to copy the contents from src to dest?
a) strcpy (char *dst,char *src)
{
while (*src)
*dst++ = *src++;
}
b) strcpy (char *dst,char *src)
ł
while(*dst++ = *src++)
ł
c) strcpy (char *dst,char *src)
{
while(*src)
{ *dst = *src;
dst++; src++;
}
}
d) strcpy(char *dst, char *src)
while(*++dst = *++src);
}
ans:b
6) Consider the following program
main()
{
int i=20,*j=&i;
f1(j);
*j+=10;
f2(j);
printf("%d and %d",i,*j);
}
f1(k)
int *k;
{
*k +=15;
}
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```

f2(x) int \*x; { int m=\*x,\*n=&m; \*n += 10; }

The values printed by the program will be

a) 20 and 55
b) 20 and 45
c) 45 and 45
d) 45 and 55
e) 35 and 35

7) what is printed when the following program is compiled and executed?

```
int
func (int x)
{
if (x
<=0)
return(1);
return func(x -1) +x;
}
main()
{
printf("%d\n",func(5));
}
a) 12
b) 16
c) 15
d) 11
```

08) COnsider the following of c code in two files which will be linked together and executed .

a.c

int i;

```
main()
{
i = 30;
f1();
printf("%d\n",i)
}
b.c
static int f1()
{
i+=10;
}
which of the following is true ?
a) a.c will fail in compilation phase because f1() is not
declared
b) b.c will fail in compilation because the variable i is not
declared
c) will print 30
d) will print 40
e) a & b
ans: e) a & b
9) Consider the following prg
void funca (int *k)
{
*k += 20
}
void funcb (int *x)
{
int m = *x, *n = \&m;
*n+=10;
}
main()
{
int var = 25,*varp=&var;
funca(varp);
*varp += 10;
funcb(varp);
printf ("%d and %d\n",var,*varp);
}
The values printed when the above prg is complied and executed
are:
a) 20 and 55
```

Get latest Fresher / Experienced Engineering Jobs at <u>www.123eng.com</u> For More Placement Papers visit <u>www.123eng.com</u> Page 115 of 214 b) 20 and 45 c) 45 and 55 d) 55 and 55 e) 35 and 35 ans: d 10) consider the following program: # include class x { public: int a; x(); }; x::x() { a=10; cout <class b:public x { public: b(); }; b::b() { a=20; cout <main () { b temp; } what will be the output of this prg? a) 10 b) 20 c) 2010 d) 1020 ans: b

Section IV - General Aptitude Section
1) In a murder case there are four suspects P,Q,R,S. Each of them makes a statement. They are p: "I had gone to the theatre with S at the time of the murder".
q: "I was playing cards with P at the time of the murder".
r: "Q didn't commit the murder".
s: "R is not the murderer".
Assuming the only one of the above statement is false and that one of them is the murderer, who is the murderer?
a) P
b) Q
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#### Page 116 of 214

c) Rd) Cann't be concludede) S

and: E

2) Mohan earned twice as much as Deep. Yogesh earned rs.3/- more than half as much as deep. If the amounts earned by Mohan, Deep, Yogesh are M,D,Y respectively, Which of the following is the correct ordering of these amounts? a) M < D < Yb) M < Y < Dc) D < M < Yd) It cann't be determined from the information given e) D < Y < M

03) Statistics indicate that men drivers are involved in more accidents than women drivers. Hence it may be concluded that a) sufficiently information is not there to conclude anything

b) Men are actually better drivers but drive more frequently

c) Women Certainly drive more cautiously than Mend) Men chauvinists are wrong about women's abilties.

e) Statistics sometimes present a wrong picture of things

04) What does the hex number E78 correspond to in radix 7?

- a) 12455
- b) 14153
- c) 14256
- d) 13541
- e) 13112

ans:d

5)Given that A,B,C,D,E each represent one of the digits between 1 and 9 and that the following multiplication holds: A B C D E

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X 4

# E D C B A

-----

what digit does E represent ?

a) 4

b) 6

c) 8

d) 7

Ans: c

6) HCL prototyping machine can make 10 copies every 4 seconds. At this rate, How many copies can the machine make in 6 min.?

a) 900

b) 600

c) 360

d) 240

e) 150

ans: a

7) if a=2,b=4,c=5 then a+b c ----- = c a+b a) 1 b) 11/30 c) 0 d) -11/30 e) -1

ans: b

8) 10^2(10^8+10^8) =

-----10^4

a) 2(10)^4 b) 2(10)^6

c) 10^8

d) 2(10)^8e) 10^10

ans: b

9) Worker W produces n units in 5 hours. Workers V and W, workers
independently but at the same time, produce n units in 2 hours.
how long would it take V alone to produce n units?
a) 1 hr 26 min
b) 1 hr 53 min
c) 2 hr 30 min

d) 3 hr 30 min

e) 3 hr 20 min

ans: d

10) if q < 0 and k = qr -s, then what is r in terms of k,q,s?

a) 2k+s ---q b) 2sk ---q c) 2(k-s) ----q d) 2k+sq ----q e) 2(k+s) ----q

ans: e

11-15 is the reasoning Questions: Occurs and Causes available in placement papers.com

Six knights - P,Q,R,S,T and U - assemble for a long journey in two travelling parties. For security, each travelling party consists of at least two knights. The two parties travel by separate

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routes,

northern and southern. After one month, the routes of the northern

and southern groups converge for a brief time and at that point the

knights can, if they wish, rearrange their travelling parties before

continuing, again in two parties along separate northern and southern

routes. Throughout the entire trip, the composition of travelling

parties must be in accord with the following conditions

P and R are deadly enemies and, although they may meet briefly,

can never travel together.

p must travel in the same party with s

Q cann't travel by the southern route

U cann't change routes

16) If one of the two parties of knights consists of P and U and

two other knights and travels by the southern route, the other members

of this party besides P and U must be

- a) Q and S
- b) Q and T
- c) R and S
- d) R and T
- e) S and T

ans: e

17) If each of the two parties of knights consists of exactly three members, which of the following is not a possible travelling party and route?a) P,S,U by the northern routeb) P,S,T by the northern routec) P,S,T by the southern routed) P,S,U by the southern route

e) Q,R,T by the southern route

ans: b

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18) If one of the two parties of knights consists of U and two otherknights and travels by the northern route, the other memnbers of thispartybesides U must be

- a) P and S
- b) P and T
- c) Q and R
- d) Q and T
- e) R and T

ans: c

19) If each of the two parties of knights consists of exactly three members of different parties, and R travels by the northern route,

then T must travel by the

a) southern route with P and S

b) southern route with Q and R

c) southern route with R and U

d) northern route with Q and R

e) northern route with R and U

ans: a

20) If, when the two parties of knights encounter one another

after

a month, exactly one knight changes from one travelling party to the

other travelling party, that knight must be

a) P

b) Q

c) R

d) S

e) T

ans: e

\_\_\_\_\_

There were three tests- technical 40 quest.(from

database, unix and C)

, apti - 25 and 1 programming part (It was to implement circular queue)

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\_\_\_\_\_

One q on as an example ( i donnt remember exactly the same q but it was looking like this)

1 a c b c X g c -----a o i f g s d j -----g h h k

4 q based on the above.-value of c, b, g etc.

GRE 13th edition-analytical ability page-389 Qs(1-4){ms Braun,mr white,mr black,ms green,mr parker,mr allen)

page-394 Qs(37-39) {baseball team-miller craig hook mizel}

six to seven question ask from R.S.AGGRWAL FOR THIS YOU MUST READ THE STATEMENT AND CONCLUSION, DERIVING CONCLUSION FROM PASSAGE, STATEMENT AND ASSUMPTIOM, STATEMENT AND ARGUMENT FROM R, S.AGGRWAL VERBAL REASONING.

1)A gambler bets on the team of seven players ABCDEFG whose winning a-4 to 1 against b-4 to 1 against c-4 to 1 against d-4 to 1 against e-5 to 1 against f-6 to 1 against g. how should he bet on g to set 20% profit.

2)If a person buy radio worth Rs 2468 and pay 7% sales .how much price of radio should reduce to pay only Rs 2468.

3)what is vasu salary if salary of vasu is more than rajan salary working in same company
i)vasu salary is 100 more than rajan salary.
ii)rajan found 2000 allowns which is 50 less than vasu.
iii)basic salry of rajan is 1000.

i)only i is required ii)i & ii is required iii)i& iii

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is required iv)i&ii&iii is required v)none of these

4)if in 100 miles race 8 person is running winner take 9.8sec and fifth man takes 10.4 sec the time of 8 man is in AP if in 4\*100 meters realy of onside is 1,4,5,8 position then win by. a).3 sec b).1 sec c).7 sec d).5 sec e)none

5)how many sons X have qwe based on relation i) ii) iii) ans(data i,ii,iii is insufficient)

Piggy backing is a technique for

 a) Flow control b) sequence c) Acknowledgement d)
 retransmition
 ans: c piggy backing

2). The layer in the OST model handles terminal emulationa) session b) application c) presentation d) transport

3. Speed of the processor is given 35mhz,find the time taken for 3 clock cycle.Ans=20 bits.

4. To address a memory of 1 mb, How many bits are required. Ans= 20 bits.

5. Semaphores used for .Ans=Synchronisation.

6. Termination emulation is done in which layer in osi model. Ans =Application layer.

7. Which of the following involve context switch.a. System call, b. Privileged instruction, c. kernal mode,d.None of these , Ans=d.

8.Given an employee table,Find the employee with the second largest salary. ans: b application9.OLE ans.winNT10)IP address

Get latest Fresher / Experienced Engineering Jobs at <u>www.123eng.com</u> For More Placement Papers visit <u>www.123eng.com</u> Page 123 of 214 11)SI\*(\*(f[])())()

12)In ANSI C which is such thing is not in Java.

```
13)typedef struct node
{
int
NODEPTR * NODE
}
```

14)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

```
15)Q. there is an employer table with key feilds as employer no. data in every n'th row are needed for a simple following queries will get required results.
a) select A employe no. from employe A, where exists from employe B where A employe no. = B employe having (count(*) mod n)=0
b) select employe no. from employe A, employe B where A employe no. = B employ no. grouply employe no. having (count(*) mod n)=0
c) both a& b
d)none of the above
```

16. Piggybacking is done for, Ans=Acknowledgement.

```
17.WHICH IS NOT BASIC data type ans.Char*
```

```
18.which of the following statement is valid for
string copy
char *srt,*ptr;
a)while(*str)
{
*str=*ptr;
++str=++ptr;
}
```

```
while(*str)
```

```
{*++str=*++ptr};
c) d)
```

21. one or two que for the complicated declaration.

```
22. Const char *a="Abcd";
char const *a="lmno";
base do this,Two que were there.
```

```
23.char *p ;
char q[20];
```

```
24.int i,*p=&i;
p=malloc(10);
free(p);
printf("%d",p);
ans : garbage
```

```
25.int i=20,*j=&i
f(i)
printf("%d",i);
```

```
26.#define val 1+2
printf("%d%d",val/val,val^3)
ans : 3 9
27.#define "this" "#"
#define (x,y) x##y
printf("this","this is")
ans: compilation error (tested)
```

28.(2^2)+(a^a)

```
29. int a ,b=7
a=b<4?b<<1:b4?71:a
ans.3
```

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30.one que on c++ class member function ans.d

31.work of memory management unit.

32.who relate virtual memory to physical memory ans.os

33.memory is allocated to variable a)when declared b)when define c)...

34.question on double linked list 35. define success 1 define failure -1 if(condition) printf(success); else printf(failure); ans success

```
36. main()
{
int var=25,varp;
varp=&var;
varp=10;
fun(varp);
printf(%d%d",var,varp);
ans a)45,45 b)55,55 c) 20,55;
```

```
37. u r given two statements
a=(10.15);
b=10,15;
if they are executed what is the output
printf("%d%d",a,b);
a)10,15 b)15,10 c)10,10 d)15,15
ans a
```

```
38. define null 0
ans=0;39. #define inc(x) x++
```

```
main()
{
int t=1;
printf("%d",inc(t++));
```

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} ans.error

40.argument in function can be passed 1)by value 2)by refference 3)....

```
41.
main
{int x=1,y=2,z=3;
x=y==z;
printf(x);
}
```

42.in switch float is not used

43.one question on register variable.

```
1.HCL has two divisions a) technology division b) application
division.if a
student opts for a) then he has to give 2 papers 1)
aptitude(25 questions) 2)
```

```
technical(30 approx).if he opts for application field then he
has
to give only
apti paper which is same as that of techni paper.
```

```
2.after the written results are declared the technology
students
are given
another test of 15 minutes in which they have to write a C
program(reversing
string, reversing singly/doubly link list(FAVOURITE))and then
interview is
taken.
```

```
3.if you have good command in comp s then opt for technology paper.
```

```
4.in apti(for tech people) if you do 8-10 out of 25 then it is
on
safe side.
```

# APTITUDE PAPER

# question not in order.i dont remember all question.if you have

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time practice

BARRON's analyttical ability.most q's from here.

1) BARRON section ANALYTICAL ABILITY page 396, practice excercises question 1-4(edition of my book 1998 check out).quest like this miss braun, mr white, miss green, mr parker etc. 2) BARRON section ANALYTICAL ABILITY page 401, practice excercises question 37-39(edition of my book 1998 check out). base ball team,pitchers-craig,hook. 3) the closing of the resturant by Mr.X on SEPT 1 was considered an unfinancial one, as the weather remained unusually clear and sunny for another one month. An author who criticizes the act of Mr. X would be proved wrong if the following was true?? ANS choice a) the weather did not usually remained fine after SEPT 1. 4) SUSAN works in a company who has restricted its employees from smoking cigerrates in the canteen. As susan is the employee of the company she does not smoke cigerrate in the canteen. Which of the following unused phrases strengthens the rules of the

company??

ANS the employees normally do not do the work for which the

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company has forbidden them to do.

5) A q's on family relation was given like How many sons X has

I P is the daughter of X

II some condt.

III some condt. ANS al I, II, III together are not sufficient.

6)a q's in which a name KAPIL is given he visits manoj's home.some condts given. ANS b)

7)A,B,C,D are the 4 plays which are organised starting from tuesday.find the day on which C was played.in this 2 condt. will be given as I..... II...... ANS both I and II

8)a quest on crypto graphy like

\_\_\_\_\_

9)a question on race was given.hell lot of condts.finally they make a team for4\*100 metres medaly.ANS E none of the above

10) a q's on profit and loss.(just brush up your concepts.)

1). Piggy backing is a technique for

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

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 ANS a)

5) c 20(no of address lines in 1MB of memory)

6) a 120(25 hz processor, what is the time taken by the instr which needs 3 clock cycles)

7) b synchronise the access(semaphores used for)

8) a system call(context switching is used in)

9) b the operating system(mapping of virtual to physical address)

10) a 177333(conversion of HEX "0xFEDB"in octal)

```
11) d used as a network layer protocall in network
and
windows(OLE)
system
```

12) b has to be unique in the sub network(internet address)

13)Q. there is an employer table with key feilds as employer no.

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data in every n'th row are needed for a simple following queries will get required results.

a) select A employe no. from employe A , where exists from employe B
where A employe no. = B employe having (count(\*) mod n)=0
b) select employe no. from employe A, employe B where
A employe no. = B employ no. grouply employe 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 feild customer no. you can see

a) delete from costomer where customer no. exists
( select distinct customer no. from customer having count )
b) delete customer a where customer no. in
(select customer b where custermer no. equal to b custemor no.
)
and a rowid
b rowid
c) delete customer a where custermor no. in
( select customer no. from customer a, customer b )
d) none of the above

15) which feature in ANSI C but not in JAVA.??ANS variable arguments.

16)preprocessor does not do one of the following??ANS type checking.

17) long int sizea) 4 bytes b) 2 bytes c) compiler dependent d) 8 bytesans: compiler dependent

18) x=2,y=6,z=6 x=y==z; printf(%d",x) ?ANS 1

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```
19) class c : public A, public B
a)2 members in class a,b can have member functions with same
name.
b)2 members in class a,c can have member functions with same
name.
c)both
d)none(ANS)
20) main()
{
char *p;
p=malloc(10);
free(p);
printf("%d",p);
}
ANS compilation error
21)a = (10, 15)
b=10,15
what are the values of a & b in ANSI C
ANS 15,10
22)main(){
int x=10,y=15,z=16;
X=V==Z;
printf("%d",x);
ANS 0
23)f(n) f(x)
{
if(x
<=0)
return:
else f(x-1)+x;
}
find the value of fn(5)? ANS 15.
24)struct {
int det;
struct prevolus;
struct new;
}
delete(struct node)
```

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```
{
node-prev-next=node-next;
node-next-prev=node-prev;
if(node==head)node
}
one element will be given.
ANS::it does not work when rp is the last element in the link
list.
25)A code will be given which searches a particular char in
the
string.
ANS:: it always works.
26)main()
{
int var =25,varp;
varp=&var;
varp p=10;
fnc(varp);
printf("%d%d",var,varp);
}
ANS::55,55 (check this out)
27)#define VALUE 1+2
main()
{
printf("%d and %d\n",VALUE/VALUE,VALUE*3);
}
ANS:: 5,7
28)What is the value assigned to the variable a if b is 7
a=b8?b<<2:b4?b1:b;
ANS::3
29) the value of the following expr (2^3)+(a^a) is
a) 1 b)2 c) 3 d) insufficient data
30) which of the following is not basic data type
ANS char*
31) the declaration of the variable does not result in one of
the
following
ANS allocatrion of the storage space for the varable.
```

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32)in C parameters are passed by ANS:: value only.

33)2 variables cannot have the same name if they are ANS:: in the same block.

34)a static funct. say s(),in as file f.c can be invoked from ANS all functs. in f.c after the definitions of s.

35)macros and functions do not differ in the following aspects ANS::variable no of arguments.

36)one q's in which he will give some different forms of STRCPY function you will have to find out which form is correct.

# HCL-TECH(it-bhu)2K3

Ordering is changed this time.So don't byheart by a,b,c,d. Byheart the answers. Pls check answer once again

Don't hesitate to answer all. Ever HR knows that Students have this qp.

Ist section of the Question is as such in the placement papers.com

Section II - C Programming

 Which of the following about the following two declaration is true

 int \*F()
 int (\*F)()

Choice : a) Both are identical b) The first is a correct declaration and the second is wrong c) The first declaration is a function returning a Get latest Fresher / Experienced Engineering Jobs at <u>www.123eng.com</u> For More Placement Papers visit www.123eng.com

pointer to aninteger and the second is a pointer to functionreturning intd) Both are different ways of declarin pointer to a function

Answer : c) The first de...

2. What are the values printed by the following program?

```
#define dprint(expr) printf(#expr "=%d\n",expr)
```

```
main()
{
    int x=7;
    int y=3;
    dprintf(x/y);
}
```

```
Choice:
a) #2 = 2 b) expr=2 c) x/y=2 d) none
```

```
Answer: c)x/y=2
```

3. Which of the following is true of the following program

```
main()
{
    char *c;
    int *ip;
    c =(char *)malloc(100);
    ip=(int *)c;
    free(ip);
}
```

ans: The code functions properly releasing all the memory allocated

4.output of the following.

main() {

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int i; char \*p; i=0X89; p=(char \*)i; p++; printf("%x\n",p); } ans:0X8A

5. which of the following is not a ANSI C language keyword?

ans:Function.

6. When an array is passed as parameter to a function, which of the following statement is correct

choice:

a) The function can change values in the original arrayb) In C parameters are passed by value. The funciton cannot changethe original value in the arrayc) It results in compilation error when the function

tries to access the elements in the array

d) Results in a run time error when the function tries

to access the elements in the array

Answer: a) The fu...

7. The type of the controlling expression of a switch statement cannot be of the type

a) int b) char c) short d)float e) none

Answer : d)float

8. What is the value of the expression  $(3^6) + (a^a)$ ?

a) 3 b) 5 c) 6 d) a+18 e) None

Answer : 5

```
9. What is the value assigned to the variable X if b
is 7 ?
X = b>8 ? b <<3 : b>4 ? b>>1:b;
a) 7 b) 28 c) 3 d) 14 e) None
ans: 3;
10. Which is the output produced by the following
program
main()
{
int n=2;
printf("%d %d\n", ++n, n*n);
}
a) 3,6 b) 3,4 c) 2,4 d) cannot determine
Answer : b) 3,4
11. What is thoutput of the following program?
int x = 0x65;
main()
{
char x;
printf("%d\n",x)
}
a) compilation error b) 'A' c) 65 d) unidentified
ans. d)
12. What is the output of the following program
main()
{
int a=10;
int b=6;
if(a=3)
b++;
printf("%d %d\n",a,b++);
}
a) 10,6 b)10,7 c) 3,6 d) 3,7 e)
none
Answer : d) 3,7
```

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```
13. What can be said of the following program?
main()
{
enum Months {JAN =1,FEB,MAR,APR};
Months X = JAN;
if(X==1)
{
printf("Jan is the first month");
}
a) Does not print anything
b) Prints : Jan is the first month
c) Generates compilation error
d) Results in runtime error
Answer: b) Prints : Jan..
14. What is the output of the following program?
main()
{
char *src = "Hello World";
char dst[100];
strcpy(dst,src);
printf("%s",dst);
strcpy(char *dst,char *src)
while(*src) *dst++ = *src++;
}
a) "Hello World" b)"Hello" c)"World" d) NULL e)
unidentified
Answer: d) NULL
15. What is the output of the following program?
main()
{
int l=6;
switch(1)
\{ default : 1+=2; \}
case 4: 1=4;
case 5: 1++;
```

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```
break;
}
printf("%d",l);
a)8 b)6 c)5 d)4 e)none
Answer : c)5
16. What is the output of the following program?
main()
{
int x=20;
int y=10;
swap(x,y);
printf("%d %d",y,x+2);
}
swap(int x,int y)
{
int temp;
temp =x;
x=y;
y=temp;
}
a)10,20 b) 20,12 c) 22,10 d)10,22
e)none
Answer:d)10,22
17. What is the output of the following problem ?
#define INC(X) X++
main()
{
int X=4;
printf("%d",INC(X++));
a)4 b)5 c)6 d)compilation error e) runtime
error
Answer : d) compilation error no ++++ operator allowed
18. what can be said of the following
```

struct Node {

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```
char *word;
int count;
struct Node left;
struct Node right;
}
```

a) Incorrect definitionb) structures cannot refer to other structurec) Structures can refer to themselves. Hence the statement is OKd) Structures can refer to maximum of one other structure

Answer :c)

```
19. What is the size of the following union.
Assume that the size of int =2, size of float =4 and
size of char =1.
Union Tag{
int a;
flaot b;
char c;
};
a)2 b)4 c)1 d) 7
ans : b.)
20) What is the output of the following program? (.
has been used to indicate a space)
main()
{
char s[]="Hello,.world";
printf(%15.10s",s);
}
a)Hello,.World...
b)....Hello,.Wor
```

c)Hello,.Wor.... (this option is correct for %s-15.10s) d)None of the above

```
ans: b.) total 15 spaces and print only 10 characters.
```

These questions are based on data sufficiency in which one has to tell if the given data in 2 statements is enough to derive an answer.

A if only (1) is sufficent. B if only (2) is sufficient. C if either is sufficient. D if both are sufficient. E data insufficient.

(1) The combined length of the longer two pieces of rope is 12 metres.
 (2) The combined length of the shorter two pieces of rope is 11 metres.

(A) (B) (C) (D) (E)

10) A certain company paid bonuses of Rs. 125 to each of its executive emplyees and Rs 75 to each of its nonexecutive employees. If 100 of the employees were nonexecutive, how many were executive?
1) The company has a total of 120 employees
2) The total amount that the company paid in

bonuses to its employees was Rs.10,000

(A) (B) (C) (D) (E)

ans. C.)

11. What fraction of his salary did Mr. Johnson put into savings last week ?

Last week Mr.Johnson put Rs 17 into savings.
 Last week Mr.Johnson put 5% of his salary into savings.

(A) (B) (C) (D) (E)

ans. B.) only 2nd.

12. Each M-type memory unit will increase the base memory capacity of a certain computer by 3 megabytes. What is the base

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memory capacity, in megabytes, of the computer ?

1) 2 M-type memory units will increase the computer's base memory capacity by 300%

2) The memory capacity of the computer after 2-M type memory units are added to the base memory capacity, is 1.6 times the memory capacity of the computer after 1 M-type unit is added to the base memory capacity.

(A) (B) (C) (D) (E)

ans. C.) either.

13. What fractional part of the total surface area of cube C is red?

Each of 3 faces of C is exactly 1/2 red
 Each of 3 faces of C is entirely white

(A) (B) (C) (D) (E)

ans: D.) both.

SECTION C

Instructions ALL NUMBER USED ARE REAL NUMBERS FOLLOWING EACH QUESTIONS ARE FIVE POSSIBLE ANSWERS LABELED A).B).C).D)&E).TICK THE BEST CHOICE.

14. How many of the integers between 25 and 45 are even ? (A)21 (B)20 (C)11 (D)10 (E)9

Answer:d)10

15. If taxi fares were Rs 1.00 for the first 1/5 mile and Rs 0.20 for each 1/5 miles thereafter. The taxi fare for a 3-mile ride was

(A)Rs 1.56 (B)Rs 2.40 (C)RS 3.00 (D)Rs 3.80

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(E)Rs 4.20

Answer :d)Rs 3.80

16. A computer routine was developed to generate two numbers (x,y)the first being a random number between 0 and 100 inclusive, andthe second being less than or equal to the square root of the first.Each of the following pair satisfies the routineEXCEPT

(A) (99.10) (B) (85.9) (C) (50.7) (D) (1.1) (E) (1.0)

Answer : A) (99.10)

17. A warehouse had a square floor with area 10,000 sq.meters. A

rectangular addition was built along one entire side of the warehouse

that increased the floor by one-half as much as the original floor.

How many meters did the addition extend beyond the original buildings ?

(A)10 (B)20 (C)50 (D)200 (E)500

Answer: c)50

18. A digital wristwatch was set accurately at 8.30a.m and thenlost 2 seconds every 5 minutes. What time wasindicated on the watchat 6.30 p.m of the same day if the watch operatedcontinuously that time ?

(A)5:56 B)5:58 (C)6.00 (D)6.23 (E)6.26

Answer :E) 6.26

19) A 5 litre jug contains 4 litres of a salt water solution that is 15 percent salt. If 1.5 litres of the solution spills out of

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the jug, and the jug is then filled to capacity with water, approximately what percent of the resulting solution in the jug is salt?

(A)7.5% (B)9.5% (C) 10.5% (D)12% (E)15%

Answer :A)7.5%

20) A plane travelled K miles in the first 96 miles of flight time.

If it completed the remaining 300 miles of the trip in 1 minute,

what was its average speed in miles per hour for the entire trip ?

(A)

(B)

(C)

(D)

(E)

Answer :(300+k)/97 \* 60

21) A merchant sells an item at a 20 percent discount. but still

makes a gross profit of 20 percent of the cost. What percent of

cost would be gross profit on the item have been if it had been sold without the discount?

(A)20% (B)40% (C)50% (D)60% (E)66.6%

Answer :c) 50%

22) A millionaire bought a job lot of hats 1/4 of which were brown.

The millionaire sold 2/3 of the hats including 4/5 of the brown

hats. What fraction of the unsold hats were brown.

(A)1/60 (B)1/15 (C)3/20 (D)3/5 (E)3/4

Answer :c)3/20

23) How many integers n greater than10 and less than 100 are there

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such that, if the digits of n are reversed, the resulting integer is n+9 ?

(A)5 (B)6 (C)7 (D)8 (E)9

Answer :D)8

24) An investor purchased a shares of stock at a certain price. If the stock increased in price Rs 0.25 per share and the total increase for the x shares was Rs 12.50, how many shares of stock had been purchased ?

(A)25 (B)50 (C)75 (D)100 (E)125

Answer :B)50

25) At a special sale, 5 tickets can be purchased for the price

of 3 tickets. If 5 tickets are purchased at the sale,

the amount

saved will be what percent of the original price of the 5 tickets?

(A)20% (B)33.3% (C)40% (D)60% (E)66.6%

Answer :c)40%

26) Working independently, Tina can do a certain job in 12 hours.

Working independently, Ann can do the same job in 9 hours. If

Tina works independently at the job for 8 hours and then Ann works

independently, how many hours will it take Ann to complete the remainder of the jobs?

(A)2/3 (B)3/4 (C)1 (D)2 (E)3

Answer :E)3

27) A decorator bought a bolt of d m number of red chips in any one stack ?

(A)7 (B)6 (C)5 (D)4 (E)3

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# SECTION III - ANALYSIS PROGRAM SEGMENTS

\_\_\_\_\_

1) Here is the structure declaration of a doubly linked list

struct dlink {
int nodeid;
struct dlink \*next;
struct dlink \*prev;
} dlink\_t;

A pointer of the head of the linked list is maintained as a global variable, whose definition is dlink\_t \*head;

The function remove\_element(dlink\_t \*rp), needs to remove the node pointed to the rp and adjust the head.

The first node's prev and the last node's next are NULL.

remove\_element(dlink\_t \*rp)
{
rp->prev->next = rp->next;
rp->next->prev = rp->prev;
if( head == rp)
head = rp->next;
}
Which of the following statement is true about the
fution remove\_element

A) It work when head is the same as rpB) It does not work when rp is the last element on the listc) It sets the head of the list correctlyD) It works in all cases

Answer :B) It does...

2) Consider the following function written in c:

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```
#define NULL 0
```

```
char *index(sp,c)
register char *sp,c;
{
   do
   {
    if(*sp == c)
   return (sp);
   } while (*sp++);
   return NULL;
  }
```

```
The first argument sp, is a pointer to a C string.
The second
argument, c, is a character. This function scarches
for the character
c, in the string. If it is found a pointer to that
location is returned
else NULL is returned.
This function works
a) Always
b) Always, but fails when the first byte contais the
character c
c) works when c is a non NULL character only
d) Works only when the character c is found in the
string
ans: a
03) What is printed when this program is executed
main()
{
printf ("%dn",f(7));
}
f(X)
{
if (x \le 4)
return x;
return f(--x);
}
a) 4
b) 5
```

```
c) 6
```

```
d) 7
```

ans: a

```
04) On a machine where pointers are 4 bytes long, what
happens when the
following code is executed.
main()
{
int x=0,*p=0;
x++; p++;
printf ("%d and %dn",x,p);
}
a) 1 and 1 is printed
b) 1 and 4 is printed
c) 4 and 4 is printed
d) causes an exception
ans: b.)
05) Which of the following is the correct code for
strcpy, that is
used to copy the contents from src to dest?
a) strcpy (char *dst,char *src)
{
while (*src)
*dst++ = *src++;
}
b) strcpy (char *dst,char *src)
{
while(*dst++ = *src++);
}
c) strcpy (char *dst,char *src)
{
while(*src)
{ *dst = *src;
dst++; src++;
}
}
```

d) strcpy(char \*dst, char \*src)

```
{
while(*++dst = *++src);
}
ans: b.)
6) Consider the following program
main()
{
int i=20,*j=\&i;
f1(j);
*j+=10;
f2(j);
printf("%d and %d",i,*j);
}
f1(k)
int *k;
{
*k +=15;
}
f_2(x)
int *x;
{
int m=*x,*n=&m;
*n += 10;
}
The values printed by the program will be
a) 20 and 55
b) 20 and 45
c) 45 and 45
d) 45 and 55
e) 35 and 35
```

```
ans: c.) 45 and 45
```

```
7) what is printed when the following program is compiled and executed?
```

```
int func (int x) {
```

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```
if (x<=0)
return(1);
return func(x -1) +x;
}
main()
{
printf("%d\n",func(5));
}
a) 12
b) 16
c) 15</pre>
```

d) 11

ans: b.) 16

08) COnsider the following of c code in two files which will be linked together and executed .

a.c

```
int i;
main()
{
i = 30;
f1();
printf("%d\n",i)
}
```

b.c

```
static int f1()
{
    i+=10;
}
```

```
which of the following is true ?
a) a.c will fail in compilation phase because f1() is not declared
b) b.c will fail in compilation because the variable i is not declared
c) will print 30
d) will print 40
e) a & b
```

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ans: e) a & b . extern functions and variables should have been declared in the files for external linkage.

```
9) Consider the following prg
void funca (int *k)
{
*k += 20
}
void funcb (int *x)
int m = *x, *n = \&m;
*n+=10;
}
main()
{
int var = 25,*varp=&var;
funca(varp);
*varp += 10;
funcb(varp);
printf ("%d and %d\n",var,*varp);
}
The values printed when the above prg is complied and
executed
are:
a) 20 and 55
b) 20 and 45
c) 45 and 55
d) 55 and 55
e) 35 and 35
ans: d.) 55 and 55. similar to program 6.)
10) consider the following program:
# include <stream.h>
class x
{
public:
int a;
x();
};
x::x()
{
a=10;
cout<<a;
}
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```

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```
class b:public x
{
public:
b();
};
b::b()
{
a=20:
cout<<a;
}
main ()
{
b temp;
}
what will be the output of this prg?
a) 10
b) 20
c) 2010
d) 1020
```

ans: d.) 1020 first constructor for A prints 10 then constructor for B prints 20.

Section IV - General Aptitude Section

1) In a murder case there are four suspects P,Q,R,S.
Each of them
makes a statement. They are
p: "I had gone to the theatre with S at the time of
the murder".
q: "I was playing cards with P at the time of the
murder".
r: "Q didn't commit the murder".
s: "R is not the murderer".
Assuming the only one of the above statement is false
and that one of
them is the murderer, who is the murderer?
a) P
b) Q

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c) R d) Cann't be concluded

e) S

and: E.) r and s are true as first two statements are contradictory. thus either P or S is murederer. as q is not murderer, he is tellinjg truth that P was with him. hence S is murderer.

2) Mohan earned twice as much as Deep. Yogesh earned rs.3/- more than half as much as deep. If the amounts earned by Mohan,Deep,Yogesh are M,D,Y respectively, Which of the following is the correct ordering of these amounts?
a) M < D < Y</li>
b) M < Y < D</li>
c) D < M < Y</li>
d) It cann't be determined from the information given e) D < Y < M</li>

ans d)

03) Statistics indicate that men drivers are involved in more accidents than women drivers.

accidents than women drivers.

Hence it may be concluded that...

a) sufficiently information is not there to conclude anything

b) Men are actually better drivers but drive more frequently

c) Women Certainly drive more cautiously than Men

d) Men chauvinists are wrong about women's abilties.

e) Statistics sometimes present a wrong picture of things

04) What does the hex number E78 correspond to in radix 7 ? a) 12455 b) 14153 c) 14256

d) 13541e) 13112

ans:d

5)Given that A,B,C,D,E each represent one of the digits between 1 and 9 and that the following multiplication holds: A B C D E X 4

EDCBA

what digit does E represent ?

a) 4

b) 6

c) 8

d) 7

Ans: c

6) HCL prototyping machine can make 10 copies every 4 seconds. At this rate, How many copies can the machine make in 6 min.?

a) 900 b) 600 c) 360 d) 240 e) 150 ans: a 7) if a=2,b=4,c=5 then a+b c ----- = c a+b a) 1 b) 11/30 c) 0 d) -11/30 e) -1 ans: b

```
8) 10^2(10^8+10^8) =
```

-----

10^4

a) 2(10)^4
b) 2(10)^6
c) 10^8
d) 2(10)^8
e) 10^10

ans: b

9) Worker W produces n units in 5 hours. Workers V and W, workers independently but at the same time, produce n units in 2 hours. how long would it take V alone to produce n units? a) 1 hr 26 min b) 1 hr 53 min c) 2 hr 30 min d) 3 hr 30 min e) 3 hr 20 min ans: d (e) 10) if  $q \ll 0$  and k = qr/2 -s, then what is r in terms of k,q,s? a) 2k+s ---q b) 2sk \_\_\_\_ q c) 2(k-s) \_\_\_\_\_ q d) 2k+sq \_\_\_\_ q e) 2(k+s)

q

-----

ans: e

11-15 is the reasoning Questions: Occurs and Causes available in placement papers.com

Six knights - P,Q,R,S,T and U - assemble for a long journey in two travelling parties. For security, each travelling

travelling parties. For security, each travelling party consists

of at least two knights. The two parties travel by

separate routes,

northern and southern. After one month, the routes of the northern

and southern groups converge for a brief time and at that point the

knights can, if they wish, rearrange their travelling parties before

continuing, again in two parties along separate

northern and southern

routes. Throughout the entire trip, the composition of travelling

parties must be in accord with the following conditions

P and R are deadly enemies and, although they may meet briefly,

can never travel together.

p must travel in the same party with s

Q cann't travel by the southern route

U cann't change routes

16) If one of the two parties of knights consists of P and U and two other knights and travels by the southern route, the other members of this party besides P and U must be

- a) Q and S
- b) O and T
- c) R and S
- d) R and T
- e) S and T

ans: e

17) If each of the two parties of knights consists of exactly three

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members, which of the following is not a possible travelling party and route? a) P,S,U by the northern route

b) P,S,T by the northern route

c) P,S,T by the southern route

d) P,S,U by the southern route

e) Q,R,T by the southern route

ans: b

18) If one of the two parties of knights consists of U and two otherknights and travels by the northern route, the other memnbers of this party besides U must bea) P and S

b) P and T

c) Q and R

d) Q and T

e) R and T

ans: c

19) If each of the two parties of knights consists of exactly three members of different pX-Mozilla-Status: 0009by the northern route,

then T must travel by the

a) southern route with P and S

b) southern route with Q and R

c) southern route with R and U

d) northern route with Q and R

e) northern route with R and U

ans: a

20) If, when the two parties of knights encounter one another after

a month, exactly one knight changes from one

travelling party to the

other travelling party, that knight must be

- a) P
- b) Q

c) R

- d) S
- e) T

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-----

## $1.(X-A)(X-B)(X_C)....(X-Z)=?$

2.two nos when added make 330.when the last digit of the greater no. is removed Ist no is obtained.find the nos. ans.300,30.

3:which word can be added at the end of one and at the front of the other to give meaningful results. GRASS and SCAPE. Ans:land.

4:a jumbled word is given: the answer is PARACHUTE.

5: at midnight it is raining .do u expect sun after 72 hours. 6:a word is to be added to three given words to give meaningful word .the ans is:POST 7: a girl likes 144 but not 145, she likes 900 but not 800....like this.what will she like: the ans is 1600. 8: a series of prime nos is given 3,5,7,11>>>find the next no .the ans is 17. 9: a no when multiplied with one less than it results into a no that is 4 lesser than its square. The ans is 4. 10: A question on some midnight problem was given .The choices are given for the present time: 21:00, 22:00,23:00,23:30 etc. the ans to this problem is 2100 hrs. 11:In this question a square was shown in which there were nine squares and in each square fruits were drawn. The ans to this question was 25.this is cost of some fruit item. 12: in a company there are salespersons and non salespersons .majority

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of

employees are salespersons.the percentage of commissioned salespersons is

more that the total salespersons ' percentage in the company.

Is majority of employees commissioned .something like that...... The ans is :YES.

13: there was a statement on dogs that can understant just two words: one

was stay and I don't remember the other one. The breed of the dogs were sheperd ,regger ,one other starting from r. this question was a tough one

and I do not remember the exact statement.but based on this statement there

were 5 questions.

The ans to 15 th question was C and 17th in the question paper was B. next question:

A FACTORY produces a product (measured in cubic feet) over seven days as per

the following schedule:

Day1 Day2 Day3 Day4 Day5 Day6 Day7

150 180 120 250 160 120 150

The finished goods are to be transported to the market by a truck having a

capacity of 2000 cubic feet. Any finished goods (ready at the end of the

day) retained overnight at the factory will incur a storage cost of rs.5 per

cubic foot for each night of storage. The hiring cost for the truck is rs.1000 per day.

1.If the total cost of transportation and storage is to be minimized, the truck should operate on
(a) 2nd,4th,6thand 7th days
(b) only the 7th day
(c) 2nd,4th,5th and 7th days
(d) only on 4th and 5th days
(e) none of these ans:()
2.if the storage cost reduces to re.0.80per cubic foot per night,the truck should operate on

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(a)2nd,4th,5thand 7th days
(b)only the 7th day
(c)2nd,4th,5th and 7th days
(d)only on 4th and 5th days
(e)none of these ans:()

## DATA SUFFICIENCY

Direction:Read the following instructions carefully and answer

questions

11-15 given below:

Each question below is followed by two numbered facts. You have to determine

whether the data given in the statement is sufficient for answering the question. Choose one of the following choices best fitting the question

and mark A,B,C,D or E as explained below.

(A) if statement 1 alone is sufficient to answer the question, but statement

2 is not sufficient.

(B) If statement 2 alone is sufficient to answer the question, but statement 1 is not sufficient.

(C) If both statements together are needed to answer the question, but neither statement alone is sufficient.

(D) If either statement by itself is sufficient to answer the question.

(E) If enough facts are not available to answer the question.

13. A dress was initially listed at a price that would have given the store

a profit of 20 percent of the wholesale cost. What was the wholesale cost of

the dress?

(1) After reducing the asking price by 10 percent, the dress sold for a net

profit of 10 dollars.

(2) The dress sold for 50 dollars.

ans:()

A company manufactures game sets in brass, ebony(wood), and teak (wood).

Each game set consists of the following components: chessmen, checkers, dice

and a box which opens into a board, a chess layout being on the outside and

backgammon on the inside. The game sets are called # 1, # 2, #3, # 4

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and # 5

in the company's catalog.

In a#1 set, only the chessmen, checkers, and dice are brass.

In a#2 set, only the chessmen and dice are brass.

In a#3 set, only the checkers and box are brass.

In a#4 set, only the box is brass.

In a#5 set, all components are brass.

21. Which of the following components CANNOT both be wooden in a single set

?

(a) Chessmen, dice

(b) Chessmen, box

(c) chessmen, checkers

(d) checkers, dice

(e) checkers, box

ans:()

22. A set in which, of the chessmen, checkers, and dice, exactly one is brass, must represent set

(a) # 1

(b) # 2

(c) # 3

(d) # 4

(e) # 5

ans:()

HCL Technology Interview 2004 in MKU

Technical interview is held for 30 min to 1 hr 20min depending upon the stuff. Concentrated areas are

1) OS Concepts

2) C Programming skill

- 3) OOPs concepts
- 4) Basics of Networking
- 5) Data structures

Only basic QP like

1) What is fragmentation? How do overcome?

2) What is semaphore?

3) What are the IPC Mechanism available? Illustrate with example

4) What is structure and union in c? write the code and explain

how they are storing in the memory?

5) They will ask to write one c program ?

6) Explain the data struture (code) for the data structures

i) Double linklist

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ii) Minimum spanning tree

iii) BFS and DFS

iv) AVL tree

v) Reverse the linklist

7) Difference between malloc and calloc?

8) write a prg in macro in c?

9) Write a simple MFC program to create a window? (They aaked me

write a prg to create a window)

10) Tell about the existing scheduling algorithm?

11) what are all E.F.Codd rule?

12) what is bit slice processor?

13) what is a deadlock? explain it?

14) what is virtual memory?

15) what is circuit switching and packet switching

16) What is the significance of friend keyword in C++?

17) Different types of inheritance?

18) do u want to ask anything from us?

HR interview

This ranges from 20 min to 45 min. They expecting ur

i) Focussing towards the technology

ii) Adaptability

iii) Family Background

iv) Team spirit

i) Tell abt yourself?
ii) what are all ur hobbies?
iii)why did u prefer your area of interest?
iv) why did u wanna be in HCL?
v) why did u choose MCA?
vi) howz interview is going on?
vii) Some general technical qp from ur area of interest?
viii) how'll u react if u r assigned in the non area of interest?
(adaptability)
ix) how're getting information abt the company?

### HCL Technology Interview 2004 in MKU

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3) OOPs concepts

4) Basics of Networking

5) Data structures

Only basic QP like

1) What is fragmentation? How do overcome?

2) What is semaphore?

3) What are the IPC Mechanism available? Illustrate with example

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vii) Some general technical qp from ur area of interest?viii) how'll u react if u r assigned in the non area of interest?(adaptability)ix) how're getting information abt the company?(

Section II - C Programming

Which of the following about the following two declaration is true

 int \*F()
 int (\*F)()

Choice :

a) Both are identical

b) The first is a correct declaration and the second is wrong

c) The first declaraion is a function returning a pointer to an integer

and the second is a pointer to function returning int

d) Both are different ways of declarin pointer to a function

Answer : c) The first de...

2. What are the values printed by the following program?

#define dprint(expr) printf(#expr "=%d\n",expr)

```
main()
{
    int x=7;
    int y=3;
    dprintf(x/y);
}
```

Choice: a) #2 = 2 b) expr=2 c) x/y=2 d) none

```
Answer: c)x/y=2
```

3. Which of the following is true of the following program

```
main()
{
    char *c;
    int *p;
    c =(char *)malloc(100);
    ip=(int *)c;
```

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free(ip);
}

choice:

a) The code functions properly releasing all the memory allocated

b) Results in compilation error as pointer of various types cannot be equated

c) The program tries to ault d)const e) void

Answer : b) function

6. When an array is passed as parameter to a function, which of the following statement is correct

choice:

a) The function can change values in the original array

b) In C parameters are passed by value. The funciton cannot change the original value in the array

c) It results in compilation error when the function tries to access the elements in the array

d) Results in a run time error when the funtion tries to access the elements in the array

Answer: a) The fu...

7. The type of the controlling expression of a switch statement cannot be of the type

a) int b) char c) short d)float e) none

Answer : d)float

8. What is the value of the expression  $(3^{6}) + (a^{a})$ ?

a) 3 b) 5 c) 6 d) a+18 e) None

Answer :

9. What is the value assigned to the variable X if b is 7 ? X = b>8 ? b <<3 : b>4 ? b>>1:b;

a) 7 b) 28 c) 3 d) 14 e) None

10. Which is the output produced by the following program
main()
{
 int n=2;
 printf("%d %d\n", ++n, n\*n);

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```
}
a) 3,6 b) 3,4 c) 2,4 d) cannot determine
Answer : b) 3,4
11. What is thoutput of the following program?
int x = 0x65;
main()
{
char x;
printf("%dn",x)
a) compilation error b) 'A' c) 65 d) unidentified
12. What is the output of the following program
main()
{
int a=10;
int b=6;
if(a=3)
b++;
printf("%d %d\n",a,b++);
}
a) 10,6 b)10,7 c) 3,6 d) 3,7 e) none
Answer : d) 3,7
13. What can be said of the following program?
main()
{
enum Months {JAN =1,FEB,MAR,APR};
Months X = JAN;
if(X==1)
{
printf("Jan is the first month");
}
a) Does not print anything
b) Prints : Jan is the first month
c) Generates compilation error
d) Results in runtime error
```

Answer: b) Prints : Jan..

```
14. What is the output of the following program?
main()
{
    char *src = "Hello World";
    char dst[100];
    strcpy(src,dst);
    printf("%s",dst);
    strcpy(char *dst,char *src)
    {
    while(*src) *dst++ = *src++;
    }
```

a) "Hello World" b)"Hello" c)"World" d) NULL e) unidentified

```
Answer: d) NULL
```

15. What is the output of the following program?

```
main()
{
int l=6;
switch(1)
{ default : l+=2;
case 4: 1=4;
case 5: 1++;
break;
}
printf("%d",l);
a)8 b)6 c)5 d)4 e)none
Answer : c)5
16. What is the output of the following program?
main()
{
int x=20;
int y=10;
swap(x,y);
printf("%d %d",y,x+2);
swap(int x,int y)
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```

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{ int temp; temp =x; x=y; y=temp; }

a)10,20 b) 20,12 c) 22,10 d)10,22 e)none

Answer:d)10,22

17. What is the output of the following problem ?
#define INC(X) X++
main()
{
 int X=4;
 printf("%d",INC(X++));
}

a)4 b)5 c)6 d)compilation error e) runtime error

Answer : d) compilation error

18. what can be said of the following

struct Node {
 char \*word;
 int count;
 struct Node left;
 struct Node right;
}

a) Incorrect definitionb) structures cannot refer to other structurec) Structures can refer to themselves. Hence the statement is OKd) Structures can refer to maximum of one other structure

Answer :c)

```
19. What is the size of the following union.Assume that the size of int =2, size of float =4 and size of char =1.Union Tag{int a;flaot b;char c;
```

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a)2 b)4 c)1 d) 7

20) What is the output of the following program? (. has been used to indicate a space) main()

{
char s[]="Hello,.world";
printf(%15.10s",s);
}

a)Hello,.World... b)....Hello,.Wor c)Hello,.Wor.... d)None of the above

(1) The combined length of the longer two pieces of rope is 12 metres.

(2) The combined length of the shorter two pieces of rope is 11 metres.

(A) (B) (C) (D) (E)

10) A certain company paid bonuses of Rs. 125 to each of its executive emplyees and Rs 75 to each of its nonexecutive employees. If 100 of the employees were nonexecutive, how many were executive?

1) The company has a total of 120 employees

2) The total amount that the company paid in bonuses to its employees was Rs.10,000

(A) (B) (C) (D) (E)

11. What fraction of his salary did Mr. Johnson put into savings last week ?

1) Last week Mr.Johnson put Rs 17 into savings.

2) Last week Mr.Johnson put 5% of his salary into savings.

(A) (B) (C) (D) (E)

12. Each M-type memory unit will increase the base memory capacity of a certain computer by 3 megabytes. What is the base memory capacity, in megabytes, of the computer ?

1) 2 M-type memory units will increase the computer's base memory capacity by 300%

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2) The memory capacity of the computer after 2-M type memory units are added to the base memory capacity, is 1.6 times the memory capacity of the computer after 1 M-type unit is added to the base memory capacity.

(A) (B) (C) (D) (E)

13. What fractional part of the total surface area of cube C is red?

Each of 3 faces of C is exactly 1/2 red
 Each of 3 faces of C is entirely white

(A) (B) (C) (D) (E)

# HCL Aptitude.TEST

1. a=2, b=3, c=6 Find the value of c/(a+b)-(a+b)/c

Ans. 11/30

- 2. What does the hexa number E78 in radix 7.
- (a) 12455
- (b) 14153
- (c) 14256
- (d) 13541
- (e) 131112
- Ans. (d)
- 3. What does the hexa number E78 in radix 7.
- (a) 12455
- (b) 14153
- (c) 14256
- (d) 13541

(e) 131112

Ans. (d)

4. Q is not equal to zero and  $k = (Q \times n - s)/2$ . What is n?

- (a) (2 x k + s)/Q
- (b) (2 x s x k)/Q
- (c) (2 x k s)/Q
- (d) (2 x k + s x Q)/Q
- (e) (k + s)/Q

 From the following statements determing the order of ranking M has double the amount as D Y has 3 rupess more than half the amount of D

Ans. Data insuffiecient

Questions 6 - 10 are to be answered on the following 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
- 6. If A occurs which of the following must occurs
- I. F and G
- II. E and H
- III. D
- (a) I only
- (b) II only

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(c) III only

- (d) I,II, & III
- (e) I & II (or) II & III but not both

Ans. (e)

- 7. If B occurs which must occur
- (a) D
- (b) D and G
- (c) G and H
- (d) F and G
- (e) J

Ans. (a)

8. If J occurs which must have occured

- (a) E
- (b) either B or C
- (c) both E & F
- (d) B
- (e) both B & C
- Ans. (b)

9. Which may occurs as a result of cause not mentioned

- I. D
- II. A
- III. F
- (a) I only
- (b) II only
- (c) I & II
- (d) II & III
- (e) I,II & III
- Ans. (c)

- 10. E occurs which one cannot occurs
  - (a) A
  - (b) F
  - (c) D
  - (d) C
  - (e) J
  - Ans. (b)

11. A 5 litre jug contains 4 litres of a salt water solution that is 15 percent salt. If 1.5 litres of the solution spills out of the jug, and the jug is then filled to capacity with water, approximately what percent of the resulting solution in the jug is salt?

(A)7.5% (B)9.5% (C) 10.5% (D)12% (E)15%

12. Working independently, Tina can do a certain job in 12 hours.
Working independently, Ann can do the same job in 9 hours. If Tina Works independently at the job for 8 hours and then Ann works independently, how many hours will it take Ann to complete the remainder of the jobs?
(A)2/3 (B)3/4 (C)1 (D)2 (E)3
Answer :E)3

13. In a murder case there are four suspects P,Q,R,S. Each of them makes a statement. They are p: "I had gone to the theatre with S at the time of the murder".q: "I was playing cards with P at the time of the murder".r: "Q didn't commit the murder".s: "R is not the murderer".Assuming the only one of the above statement is false and that one of them is the murderer, who is the murderer?

a) P

b) Q

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c) R

d) Cann't be

concluded

e) S

Ans: E

14. Mohan earned twice as much as Deep. Yogesh earned rs.3/- more than half as much as deep. If the amounts earned by Mohan,Deep,Yogesh are M,D,Y respectively, Which of the following is the correct ordering of these amounts?

- a) M < D < Y
- b) M< Y < D
- c) D< M < Y
- d) It cann't be determined from the information given
- e) D< Y < M

15. Statistics indicate that men drivers are involved in more accidents

than women drivers. Hence it may be concluded that

a) sufficiently information is not there to conclude anything

b) Men are actually better drivers but drive more frequently

c) Women Certainly drive more cautiously than Men

d) Men chauvinists are wrong about women's abilties.

e) Statistics sometimes present a wrong picture of things

16. Given that A,B,C,D,E each represent one of the digits between 1 and 9 and that the following multiplication holds:

A B C D E X 4 ------E D C B A ------ what digit does E represent ?

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- a) 4
- b) 6
- c) 8
- d) 7
- Ans: c

17. HCL prototyping machine can make 10 copies every 4 seconds. At this rate, How many copies can the machine make in 6 min.?

- a) 900
- b) 600
- c) 360
- d) 240
- e) 150
- Ans: a

18. If a=2,b=4,c=5 then

- a+b c - ---- = c a+b a) 1 b) 11/30 c) 0 d) -11/30 e) -1 Ans: b
- 19. 10^2(10^8+10^8) =----- 10^4
  - a) 2(10)^4
  - b) 2(10)^6
  - c) 10^8
  - d) 2(10)^8

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e) 10^10

Ans: b

20. Worker W produces n units in 5 hours. Workers V and W, workers independently but at the same time, produce n units in 2 hours.how long would it take V alone to produce n units?

- a) 1 hr 26 min
- b) 1 hr 53 min
- c) 2 hr 30 min
- d) 3 hr 30 min
- e) 3 hr 20 min
- Ans: d

Six knights - P,Q,R,S,T and U - assemble for a long journey in Two ravelling parties. For security, each travellingparty Consists of at least two knights. The two parties travel by separate routes, northern and southern. After one month, the routes of the northern and southern groups converge for a brief time and at that point the knights can, if they wish, rearrange their travelling parties before continuing, again in two parties along separate northern and southern routes. Throughout the entire trip, the composition of traveling parties must be in accord with the following conditions P and R are deadly enemies and, although they may meet briefly,can never travel together. p must trave in the same party with sQ cann't travel by the southern route U cann't change

21. If one of the two parties of knights consists of P and U and two other knights and travels by the southern route, the other members of this party besides P and U must be

#### a) Q and S

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b) Q and

Т

- c) R and S
- d) R and T
- e) S and T
- Ans: e

22. If each of the two parties of knights consists of exactly three members, which of the following is not a possible travelling party and route?

- a) P,S,U by the northern route
- b) P,S,T by the northern route
- c) P,S,T by the southern route
- d) P,S,U by the southern route
- e) Q,R,T by the southern route

Ans: b

23. If one of the two parties of knights consists of U and two other knights and travels by the northern route, the other memnbers of this party besides U must be

- a) P and S
- b) P and T
- c) Q and R
- d) Q and T
- e) R and T
- Ans: c

24. If each of the two parties of knights consists of exactly three members of different parties, and R travels by the northern route, then T must travel by the

a) southern route with P and S

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b) southern route with Q and R

c) southern route with R and U

d) northern route with Q and R

e) northern route with R and U

Ans: a

25. If, when the two parties of knights encounter one another after a month, exactly one knight changes from one travelling party to the other travelling party, that knight must be

a) P

b) Q

c) R

d) S

e) T

Ans: e

26. A gambler bets on the team of seven players ABCDEFG whose winning a-4 to 1 against b-4 to 1 against c-4 to 1 against d-4 to 1 against e-5 to 1 against f-6 to 1 against g. how should he bet on g to set 20% profit.

27. If a person buy radio worth Rs 2468 and pay 7% sales .how much price of radio should reduce to pay only Rs 2468

28. What is vasu salary if salary of vasu is more than rajan salary working in same company

i)vasu salary is 100 more than rajan salary.

ii)rajan found 2000 allowns which is 50 less than vasu.

(iii)basic salry of rajan is 1000.

(i)only i is required

(ii)i & ii is required

(iii)i& iii is required

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Visit www.123eng.com for latest Jobs Chat with other engineers at www.123eng.com/forum (iv)i&ii&iii is required (v)none of these If in 100 miles race 8 person is running winner take 9.8sec and fifth man takes 10.4 sec the time of 8 man is in AP if in 4\*100 meters realy of onside is 1,4,5,8 position then win by. a).3 sec b).1 sec c).7 sec d).5 sec e)none

30. How many sons X have gwe based on relation

i)

29.

ii)

iii)

```
ans(data i,ii,iii is insufficient)
```

31. A sink has 12 lits of water some quantity of water is taken out. if the remaining water is 6 litres less then thewater taken out then quantity of water taken out is.

a.3

b.6

c.9

d.1

32. which is the 4 digit number whose second digit is thrice the first digit and 3'rd digit is sum of 1'st and 2'nd and last digit is twice the second digit.

1.2674

2.1349.

3.3343

4.3678

33. In a straight highway 2 cars starts from the same point in opposite directions each travels for 8 Kms and take left turn then travel for 6 Kms

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what is the distance between them now.

- 1.16
- 2.20
- 3.25
- 4.10

34. A problem based on house numbers.

35. Five students compare their test and quiz marks.some datas given.5 questions based on this.

# C Programming

```
36. Which of the following about the following two declaration is true
```

- i ) int \*F()
- ii) int (\*F)()
- Choice :

a) Both are identical

b) The first is a correct declaration and the second is wrong

c) The first declaraion is a function returning a pointer to an integer and

the second is a pointer to function returning

int

d) Both are different ways of declarin pointer to a function Answer : c) The first de...

37. What are the values printed by the following

program?

```
#define dprint(expr) printf(#expr "=%d\n",expr)
main()
{
    int x=7;
    int y=3;
    dprintf(x/y);
}
```

Choice:

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ans: The code functions properly releasing all the memory allocated

39. .output of the following.

38.

```
main()
    {
        int i;
        char *p;
        i=0X89;
        p=(char *)i;
        p++;
        printf("%x\n",p);
        }
        ans:0X8A
```

40. which of the following is not a ANSI C language keyword? ans:Function.

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41. When an array is passed as parameter to a function, which of the following statement is correct choice:

a) The function can change values in the original array

b) In C parameters are passed by value. The funciton cannot change the original value in the array

c) It results in compilation error when the function tries toaccess the elements in the array

d) Results in a run time error when the function tries to access the elements in the array

Answer: a) The fu...

42. The type of the controlling expression of a switch statement cannot be of the type

a) int b) char c) short d)float e) none Answer : d)float

43. What is the value of the expression  $(3^6) + (a^a)$ ?

a) 3 b) 5 c) 6 d) a+18 e) None

Answer: 5

44. What is the value assigned to the variable X if b is 7 ?
X = b>8 ? b <<3 : b>4 ? b>>1:b;
a) 7 b) 28 c) 3 d) 14 e) None
ans: 3;

45. Which is the output produced by the following program main()
{
 int n=2;
 printf("%d %d\n", ++n, n\*n);
}

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```
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    a) 3,6 b) 3,4 c) 2,4 d) cannot determine
    Answer : b) 3,4
46.
        What is th output of the following
program?
     int x = 0x65;
     main()
       {
       char x;
       printf("%d\n",x)
      }
    a) compilation error b) 'A' c) 65
                                           d) unidentified
47.
        What is the output of the following program
     main()
       {
        int a=10;
        int b=6;
        if(a=3)
        b++;
        printf("%d %d\n",a,b++);
        }
     a) 10,6 b)10,7 c) 3,6 d) 3,7 e) none
      Answer : a) 10,6
48.
       What can be said of the following program?
     main()
       {
         enum Months {JAN =1,FEB,MAR,APR};
         Months X = JAN;
         if(X==1)
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```

```
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           {
            printf("Jan is the first
month");
          }
       }
     a) Does not print anything
     b) Prints : Jan is the first month
     c) Generates compilation error
     d) Results in runtime error
      Answer: b) Prints : Jan..
       What is the output of the following program?
      main()
         {
            char *src = "Hello World";
            char dst[100];
            strcpy(src,dst);
            printf("%s",dst);
            }strcpy(char *dst,char *src)
             {while(*src) *dst++ = *src++;
             }
             ) "Hello World" b)"Hello" c)"World" d) NULL e) unidentified
             Answer: d) NULL
```

49.

What is the output of the following program? 50. main() { int I=6; switch(I) { default : I+=2; Get latest Fresher / Experienced Engineering Jobs at www.123eng.com For More Placement Papers visit <u>www.123eng.com</u> Page 184 of 214

```
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```

```
case 4: I=4;
         case 5: I++;
         break;
         }
         printf("%d",I);
          }
    a)8 b)6 c)5 d)4 e)none
    Answer : a)8
What is the output of the following program?
main()
    {
    int x=20;
    int y=10;
    swap(x,y);
    printf("%d %d",y,x+2);
   }
     swap(int x,int y)
         {
          int temp;
          temp =x;
          x=y;
           y=temp;
         }
     a)10,20 b) 20,12 c) 22,10 d)10,22 e)none
    Answer:b)20,12
```

51.

52. What is the output of the following problem ?#define INC(X) X++

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Visit <u>www.123eng.com</u> for latest Jobs Chat with other engineers at www.123eng.com/forum main() { int X=4; printf("%d",INC(X++)); } a)4 b)5 c)6 d)compilation error e) runtime error Answer : d) compilation error 53. what can be said of the following struct Node { char \*word; int count; struct Node left; struct Node right; } a) Incorrect definition b) structures cannot refer to other structure c) Structures can refer to themselves. Hence the statement is OK d) Structures can refer to maximum of one other structure Answer :c) 54. What is the size of the following union. Assume that the size of int =2, size of float =4 and size of

int a; flaot b; char c; }; a)2 b)4 c)1 d) 7 Get latest Fresher / Experienced Engineering Jobs at <u>www.123eng.com</u> For More Placement Papers visit <u>www.123eng.com</u> Page 186 of 214

char =1.

Union Tag{

# Visit www.123eng.com for latest Jobs Chat with other engineers at www.123eng.com/forum 55. What is the output of the following program? (. has been used to indicate a space) main() { char s[]="Hello,.world"; printf(%15.10s",s); } a )Hello,.World...

b)....Hello,.Wor

c)Hello,.Wor....

d)None of the above

# HCL PAPER ON 10th APRIL AT COIMBATORE

Total No Attended : around 330 Total Ppl placed : 89

There were three rounds **First Round : Apptitude** 35 q apps.(1 hour) 20 q technical(15 mins)

Apps, logical reasoning, Data interpretation/sufficiency, Technical, microprocessor memory arrangement, c, memory management algorithm stuff etc

#### Second Round: Technical HR interview

I entered . The HR asked me to relax and have some water. i acceptd it and said thanks. He asked to say something interesting - not about me . no academic stuff. i asked him if i cud explain him bout Nanotechnology. he said no. then i asked him if i cud explain him bout Karunya. he said ok i told him about my college. that went on for a few minutes. then he asked me to tell bout myself . i told him. (ps: Guys - Do this part well.) told me to explain bout Nanotechnolgy. i explained it briefly. then he asked some qs related to my hobbies Then he told me to explain someting in which i cud answer anyqs if asked. i gave my area of intrest. i started explaining it . he asked some qs in the middle. i asweres them.

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Then he asked me to give a concept for a c program to match two nos in an array.

(At that moment he was offered Tender coconut drink)

i was asked to write a c code for finding odd nos in a sequence.

when i finished writing the code, he offered the drink to me. i gladly accepted it.

then i explained the code at which time when i was also having the drink. ( It was a nice time) Then he said ok.

i thanked him for the drink. and then it was over.

# **Third Round: HR Interview**

since there were too many people selected for HR interview, they made the HR round as GD.

There were 10 ppl in my round.

we were asked to suggest a topic.

each guy was saying something. i was the last to suggest.

i cudnt think of anyting . the only thing which came in my mind was - Is GD really necessary?

SO i jus said that directly from the heart.

the HR took it has a topic & said it was a nice topic.

though i didnt speak anything . later the topic was changed to " Is Technical Interview necessary ? "

The HR asked me to speak something . Then i gave a point. finally it was concluded. Then we were asked for some Qs. I asked two Qs. then it was also done.

A day later The Results were announced. I was happy to see my name I thanked God.

#### Some FINAL Advice

Try Solving Logical Resoning and General aptitude stuff. Work On GDs . Be very good in your areas of interest. Also pray to God. Its always God 's grace which takes you up the ladder. You do ur part . GOD will bless you work.

In case you get rejected dont worry . Work on where you went wrong.

# HCL TECHNOLOGIES PAPER ON 14th MARCH

hi frnds..its really lucky to get thorough hcl..it consists of 3 rounds.aptitude,technical, and hr.

in aptitude all puzzles cam..pls follow shakuntala devi pattern..some english passage,logical reasoning like A,B,C,D,E,F,

BICYCLE, MOTORCYCLE, TRUCK, ETC.. you have to find who does which n resides in which city..all types from R.S.Aggarwal.

in apti the cut off is very low..so tick all the answers..they ll tell u negetiv marking..but i think actually they dun do so..so mark as many ans possible.

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35 apti in 1 hr.next 20 technical questions were given in 15 mins time. remember ee,ece, has a diff cut off than cse,it deptment.so cse,it guys pls score more than 12 out of 20. about 90 cleared in aptitude out of 130.

then i was taken to technical round.

me: good afternoon sir sir: yes pls sit.can i have ur cv? the person was a young chap, i was in panel B.panel A was easy..mostly hr questions and a few technical ..but my panel was damn technical all through. me: o hh sure. sir: so, shreya u took part in quest?when?u went to doordarshan? me: y es sir.it was a quiz contest..and our team won..it was when i was in class 11. sir: ok.so do u know c?c++? me: yes sir. sir: tellme sumthing bout functions to pointers. me :sir what u want me to xplain? sir: dynamic memory allocation. me :xpalined well. sir: whats the difference between calloc and malloc? me: xplained. sir: xplain doubly linked list. me:draw the diagram and then xpalined well. sir: what is its difference with single linked list? me :again draw picture and xplained with code. sir: tell the algorithm of binary search. me: gave it. sir : if i give u a few elements can u insert them in a binary tree? me: yes sir. sir: he gave me.. me: done a mistake sir: what algorithm u told ur binary search tree is not matching with it..then he told me the mistake me: yes sir..but my algorithm was right..during insertion i got confused with b tree. sir:ok.so do u know whats normalization? me: yes sir..xplained very good..all the reasons y we use it. sir: ok.give me examples with 1NF,2NF,3NF,BCNF. me: draw a table and xplained all..how it is done..and converted it to BCNF. sir: whats thread.what is its difference with process? me: gave well..this time i was puzzled..started swaeting cz he dint give me time even to think and he was switching topics.. sir: o k have u heard the name of mutual excluson? me: sir..previous ques..answered well. sir: whats kernel? me: again told ... sir: ok my next q..that means mutual exclusion.

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me:gave it. sir: okk..u know c++ naa? me: y es sir..a bit. sir: whats oops concepts? me: i explained all starting with abstraction.data hiding,encapuslation,overloading,class,objects,overridding,polymorphism and all. sir: okk thank u...u pls wait in a couple of minutes...u ll be called 4 hr. i thought i got cleared the technical round. hr: well ur family background. me: told. hr: t hree puzzles one after another. me: solved .. hr: okk good..what u think u scored in apti? me: i thought well hr: no u hv just crossed the cut off. hr: how was ur technical? me: well sir..it was easy 4 me, i knew hcl is doing with all technical..so i prepared it well. hr: okk good..so what was ur joint rank? me: told. hr: u went 4 NIITat naa?what was ur rank? me: told..my rank was good.. hr: do u have any relocation problem? me :no mam..not at all. hr: okk..shreya so whta are the fields that Hcl serves? me :i got it from their ppt..so managed.. hr: y dint u get in cts? me: dat was my bad luck..but no harm to me..cz i got the golden chance to b in hcl rounds. hr: well go through our website once. me: thank u mam..good evening.bye.

i did leave then.smartly..dun lose ur eye contact..b smart..but do ur technical roung very well..as they are selecting very crudely..splyy from my panel..only a few good were selected.

# HCL PAPER ON 8th MARCH AT BHOPAL

Hello Frenz!!

I m sourabh pursuing my B.E. in CSE from UIT-RGPV,Bhopal.HCL came to our college on 9 march.

450 students appeared for writtern test. As the flight of HCl official was late .test started @ 8 pm .

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pattern for writtern test..
35 que aptitude.
puzzles.
maths section
time & distance.
blood relation.
coding n decoding.
20 que of technical
15 from c & c++
rest r from micrpprocessor & s/W testing DS.

technical was quite easy but apti was tough I cracked only 20 and in technical I did 16. very important abt - marking they told us may or may not be.....

results of writtern were declared in morning 7 am sharp..... luckily I got qualified this round only 102 were selected.....

after that GD round started .....my topic was Favourite movie..... moderator was very cool person he want us to be comfortable ,so he strted talking with gf/bf.

after that out of d group of 10 m d only one who got cleared gd round..... 40 student cleared gd....

Now finally Interview round comes..... I was very nervous @ that time...... my interview was taken by mam....

she strted with ..

(1)Introduce urself.

(2) family background.

(3)sourabh,tell me d area's in govt. where we can apply IT.

I told about e-governance, agri based channels , connecting each depptt of govt.....

(4)tell me about SDLC(s/w development life cycle...)

(5)ERP/SAP.

(6)tell me d types of project that ne IT company deals..

(ee)y hcl....give d best details of company to them...they will get impress..

(ew)hv u appeared in ne other company.....

(7) abstraction n Encapsulation.

(8)she took mine writtern copy told to solve d puzzle...and some apti question(so guyz dont make guesses...)

(9)why this college ...

(10)abt my rank in state ...

(11)As m getting mech in SGSITS Indore ...why this not..

(12)now she asked me about relocation..

(13)bond of 18 months ..

(14)my project.....

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now itz over....after 5 hours result came ..and hcl official came and announced d result....only 20 were selected....when he annonced my name.....I was so happy....that I cant tell you.....

Now after rejection from hr of tcs ,mbt,satyam....I was so depressed .....but now I proud to say m hclite......so guyz all d best.....campus is all about luck n little bit prepration......meet u all in hcl.....

# HCL TECHNOLOGIES PAPER ON 1st MARCH AT KOLKATA

Hi Guys !!!!

This is Sourish from MCKV Institute of Engineering, I am going to share my experience about the HCL Technologies Campusing procedure which took place in our college on 1st March 2007. It was an ON Campus.

It took 2 days for the whole process to end

#### First Round - Aptitude -> 35 Apti questions + 20 Technical questions

It started at around 12:30 pm

The Aptitude part was quite tough as most of the problems were in the form of puzzles

[PLEASE NOTE: There are negative marks as well, sometimes they dont apply the negative marking if the performance on the whole is not so good ], so answer your questions accordingly.

Make sure that you tick only those on which u r confident. The English questions were quite easy .There were some small passages and u have to answer some questions from those passages Arranging the sentences in perfect order were also there in the paper ,

[They gave 60 mins for aptitude section and took the papers, After 5 mins they gave us the Technical paper which was to be solved by 15 mins]

The technical part was a bit easy and I managed to answer 16 out of 20 correctly

[Tips : Try to go through the whole test paper first and find which questions can you solve confidently, because sometimes most of the easy are placed at the last, or in the middle, so dont get panic if the first question is too difficult]

About 130 students gave the aptitude paper and 91 were selected for the next round and I was one of them

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#### **Second Round -> Technical Interview**

It started at around 3:45 pm

The selected candidates were divided into two panels , Panel A and Panel B . My name was the third in Panel B So as soon as I cleared the Aptitude round my name was called within 30 minutes ,

I was called at 4:15 pm

I went inside the interview hall

Me : Good evening Sir , may I have the seat ?
Sir : Sit down Sourish . May I have your CV ?
Me : Sure Sir [ and I handed over my CV to him] [At that moment he took out a form and asked me to fill it]
Sir : Sourish please introduce yourself
Me : [I started introducing myself and chatted a lot on my extra curricular activities , I also chatted about cricket for a while as I had written that playing cricket was my hobby]
Sir : Why u chose IT as your career line
Me : Blah Blah
Then he asked me many Technical Questions which are as follows
1: What is class ?
2: What r objects? Explain its uses
3: What is polymorphism ? What is Inheritance ? Give a real life example of both
4: What is Abstraction ?
5: What is function overriding ?

- 6: What is LAN, WAN, SAN with examples
- 7: Write an SQL query using Select statement
- 8: Explain Join command

I answered them

Sir : Thank you Sourish [with a smile] Me: Thank you Sir It was a 30 minutes interview I was satisfied by my interview and was hoping to get selected for HR round

And yes, my name was 1st in the HR list and so I was called within 15 minutes for the HR Interview

Third & Final Round-> HR Interview

I was called at 5:05 pm

There was a mam taking the interview and I entered the room

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Me : Good evening Mam Mam : Good Evening Sourish Me : May I have the seat Mam Mam : Yaa sure

The HR questions were as follows
1: Family background
2: Why MCKV ? [MCKV -> my college]
3: What do u think about the aptitude paper?
Me : It was a mixed bag for me and as most of them were puzzles it was very time consuming and luckily I got through it

4: Do you have any plans for Higher studies?

Me : Right now I want to concentrate on my B Tech , after that when I will feel that I am well established with some work experience then I will opt for an MBA degree

5: Do you have any problems in Relocation(postings in different places)? Me : No Mam , I dont have any problem , I can reside in any place in India

6: What if I send u abroad ? Me : Still I dont have any problem

7: What r your weakness ? Me : I am afraid of spiders Mam [ suddenly a funny environment was created]

[Tip : Try to make the conversation as much lively as possible and whatever you speak always speak it loud and clear]

8: When you heard that HCL is comming in your collg ?9: What have you prepared for HCL interviewMe : C , JAVA , Data structures mam

10: If you were given a project in HCL, can you do it ?Me : Yes mam, I can and I will do itMam: Ok Thank you SourishMe : Thank you Mam

It took 15 minutes and I was fully satisfied by my HR interview But now the real test had begun for me, I had to wait for a full one day to know the results The next day at around 8:45 pm the whole process ended

Out of 91 students 59 cleared the Technical round and out of 59 students 35 students were finally selected and by GOD's grace I was among those 35 students, after one sleepless night and the tensed next day I got a sigh of relief by hearing my name as soon as it was announced

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Now I am a part of HCL Technologies, And I am proud to be called as an HCLite !!!! Believe in yourself and believe in GOD and success will come in your way

# HCL TECHNOLOGIES PAPER ON 1st MARCH

This is Abhisek from MCKV Institute of Engineering, I am going to share my experience about the HCL Technologies Campusing procedure which took place in our college on 1st & 2nd March 2007.

It took 2 days for the whole process to end.

The who process is based on ..... 1. PPT 2. Aptitude = 35 Apti questions( 1 hr ) + 20 Technical questions ( 15 mins ) 3. Technical Interview 4. HR Interview

The reporting time was 9:30am ...... but the flight was late ...... so the mam along with two sirs came after a short delay ...... at abut 10-30 ...... and the PPT tated around 11. there was a nice video at first, I recognized that was a "HCL Anthem" (http://www.hcl.in/anthem.asp )video and a bit modified from HCL s website. them mam explained the facts of HCL and 18 month bond, statistics etc.

Try to listen the PPT carefully ...... though its boring, that comes handy in HR. Mam asked me only abut HCL in HR.

The Aptitude part was mainly composed of ...

- 1. Some Puzzles( From RS Agarwal's Non-verbal and Sakuntala Devi )
- 2. Some DI problems( very easy if u focus )
- 3. Some CAT standard passages ( i.e. 2 questions for 1 page long passages )

So My suggestion will be first attempt the DI, then eng, then take rest of time to solve puzzles .

The paper was a bit tough ..... but DI and English was much easy though.

#### BEWARE, THEY SAY THERE MAY BE NEGATIVE MARKING, BUT THERE ISNT ..... ITS ONLY MAY BE, SO TRY TO ATTEMPT ALL QUESTIONS

The Technical part was a bit easy ..... mainly composed of C,C++,OS and mainly pointer based problems. ECE guys may hav some problems with that.

127 given d exam ...... and 86 cleared d aptitude.

In Technical Interview there was two men, and only two panels ...... I was given in to panel B. I waited the whole day and at 8:30pm they said that remaining part will be taken in next day. So I came back home at around 10:15 and went back college again d next day morning.

next day another person joined in as Panel C. and again I was waiting ...... After a long waiting ...... in 1:30pm ...... I went to give the Technical Interview.

me: good after noon sir. sir: good after noon, please hav ur sit. me: thanks. sir: do ya hav a cv wit u? me: yes sir. ( I handed it over t him ) sir: please fill up d form quickly. me: ok sir. (after filling .... I handed it to him) sir: introduce urself. me: blah blah. ( tell mainly ur personal and hobbies part here ) sir: u like cars?? (confused) me: cars?? sir do ya mean 4 wheelers?? sir: yes ... . me: sir every1 likes 2 ride cars ..... me too ..... but nt very much interested. (:P) sir: ok temme ur strengths. me: sir ..... personal or academic? sir: no no ..... academic ( me a bit surprised ). me: C. sir: ok why r u into IT industry? me: to serve people ..... blah blah. sir: but why IT? why nt any other? me: sir ..... I mainly like computers ..... I could hav chosen CSE ..... but I like to server people for which the technology is built. So I get both in IT. blah blah. (sir is impressed i think).

sir: ok lets ask you a few questions.

then he asked me a whole lot of questions.

He strated from size of integers. I told 4 bytes. Sir tried to confuse me. I explained him very clearly dat it is mainly architecture and then compiler dependend.

Sir agreed but den suddenly jumped to microprocessor architecture and then bus structure. I explained (I missed d control bus part though).

Then sir asked how instruction is executed ...... I tried six times ..... but he wasnt satisfied. At last I told him abut bit pattern and he told dat he was expecting that answer only, then he asked me abut compiler, linker, loder and who controls them (OS), then he

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asked me abut some scheduling algorithms and how they are handled.then abut polymorphism, overloading , overriding and OOP features and their advanteges over C.

Then he told me to write a C Structure with double pointers. I did that easily.

```
struct abc {
  struct abc *x;
  struct abc **y;
}
```

struct abc a;  $a \rightarrow y = *(a \rightarrow x);$ 

that was d sloution.

abut DS he asked only abut BST Algorithms.

then he asked some pointer related problems ...... and theor solutions ......mostly based on technical apti paper ...... and I did explained them. But it was bit difficult as It takes much time to maniplulate pointer problems. ( I dont remember though now ).

Then he asked me some problems from technical apti paper and asked me to solve them without even seeing d options. I did that. and abut a C++ problem ...... I stated " Sir, I dont know C++, but I know Java". Give them an alternative field to question if you dont know any specific 1 ).

then sir stated to rate me between 1 to 5. I said 4. Sir smiled "Why not 5, why only 4??" I told "Sir Itwas my 1st interview, so I am a bit nervous, so I wasunable to give my fullest. Since I gave my 80% so rate myself as 4".

Sir smiled and said " u may go now".

I crossed mt fingers ...... and when I was out my friends looking at me starangely. Then I found out I hav given 1 hr 10 min long technical ..... longest in total campusing. oof!! Finally the results came after 1 hr dat I was selected for HR. I felt a bit relieved. Only 57 was selected for HR amongest 86 given the Technical.

The HR interview was abut 20 mins long and a very simple 1.

there was 1 mam ...... she was watching my cv ( They keep CV, apti paper, rough sheet, rough sheet from Technical all stapled togather )

Mam asked me abut my family background. I mentioned my father is in Software Industry.( she quickly noted that ). then where I firsted heard abut HCL. I told her that from a student of my father when I was in class 8.

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then asked me only abut where HCL can take new steps in IT industry. ( I told camputerization of Govt Works ...... which brings HCL Reputation, fame and honour ). Then told abut e-Learning in schools & colleges ...... banking .... power quality regulation etc etc. ( Mam was very impressed abut e-Learning and Govt. Services ). Then mam asked me abut my hobbies. I mentioned swimming. Mam asked " why dont ya took dat as ur profession??" . I replied " I like swimming ... I even know how to rescue some1, but I dont take it professionally as it is my HOBBY". [:D] mam enjoyed dat part and was smiling

then she asked me abut higher education. I told I hav no such plans. mam asked since u r family is so highly educated ..... why dont u? I told mam that If I could hav wished I hav done Bsc MSc and Dr. but i didnt. as a like applcation better than hypothesis and etc etc. Mam seemed impressed. then mam asked abut reloaction and 18 months bond and etc etc. Mam then said nice to meet u. I hand shaked with mam and told " The pleasure is mine".

and the HR was over. AT night 9:30pm they declared d results. 35 were selected and I was one of them ..... so happy.

To every1 trying 2 become an HCLite ...... just be confident ...... they mainly check d confidence and then tech knowledge ...... so dont be afraid ....... just trust urself ........ I am waiting for u to become another HCLite like me ..... in HCL [:D]

# HCL TECHNOLOGIES PAPER ON 12th FEBRUARY

Hello,

Im about 2 share my experience of HCL technologies recruitment drive held on 12th February,2007 at Lucknow . this was d first company coming 2 our collg so I was not so confident dat I'l make it!! My branch is Electronics n communication..(6th sem)

Venue: Northern India Engineering College (BBD GEI)

First was WRITTEN, it had 2 sections :

(1)Aptitude: aptitude had 35 questions ...Many repeated questions were there,

Data interpretation, puzzles, passages, jumbled sentences,etc...pattern was same. I cant recall all ques,,but il try:

One was a question on nails......two passages....a question on race...

Q) how many odd numbers r there between 2000 & 4999.

Q) a figure involving concepts of geometry.(not dat tuf!)

Q) a question on multiplication of two nos. with unknown digits (O1 E1 O2

E2...)(seemed tuf 2 me so I didn't attempt!)

Q) a similar question : A exists if C is present B exists if D & A are present ... n so on(quite a simple question I got d answer with truth table method it got easy)

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Q) somewhat same question as above involving Figo, Ronaldo ..etc...& one drives scooter while the other rides bicycle....n so so(was easy!...MUST give time 2 such questions)

Q) a question on years(simple one!)

To cut it short apti was nt dat tuf....i jus left those questions of which I had absolutely NO IDEA...use ur rough sheet 2 the fullest.!

(2)Technical: this section had 20 questions & we were givn 15mins 2 solve.....topics àmicroprocessor,physical n logical address, little endian & big endian mode, complexity of algorithms,Revise complete Data structure(VRY VRY IMP!)..a simple question to fine 2's complement ...C programs (POINTERS—"Most IMP")....

After written we expected 2 have GD....but it got cancelled...so few students had their Technical & Hr the same day......

My turn was on 13th Feb ..(the next day)....whole night tension, anxiety, fear kept me awake!!!..my whole bed was piled with buks..all I cud get.. i had never faced interview n all before ...n was really scared of failure...becoz once things get in our hand we don't want 2 let it go...

# **TECHNICAL INTERVIEW:**

We gathered at college in morning at 9:00 am...my patience was put 2 test that day...my turn came at 8:00Pm...i was physically n mentally exhausted...but had 2 give a try at least....

As the interview started Sir asked 4 my CV...n brief introduction... & then started firing all questions one by one!

Sir-do u know C, well? Me-yes sir.

Sir-Confident

Me-yes sir! I said im not a proficient but am learning.
Sir- difference between c & c++?
Me-told him all bout OOPs
Sir-what is abstraction, polymorphism? Types of polymorphism? types of inheritance?
Me-told him all whatever I knew...while describing types of polymorphism(runtime & compile time) I mentioned "virtual functions"---(he interrupted)
Sir-do u know wat r virtual functions?
Me-I told him (as I had read it 5mins befor)...& also said I didn't hve detail knowledge of it..
Sir-u knew those questions I am askin???(his strong voice echoed in my ears)
Me-I got scared first..but his smile infused a confidence in me n I too replied coolly...dat I jus read in some buk jus bfor comin(its better 2 tell wats true)..
Sir-okok so listen im explaining this 2 you.

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(he explaind me a whole program involving virtual functions n the two ways they are calld)...he asked me 2 listen carefully n confirmed that he wud ask me questions regarding it next time I met him....

I got excited at this ..but had 2 control it as the interview was still at progress...

Sir-now u tell me about pointers?

Me-told him.

Sir-(he gave me a program & asked 2 find its output)

Me-I had gone through pointers so it wasnt dat tuf 4me...but still I took sometime 2 giv the answer..n got it rite!(he seemed pretty happy with dat)

Sir-do u kno bout inline functions?

Me-no sir..(I had no idea)

Sir-wat are stacks & queue?

Me-I told ..(ask 4 a pen n paper n explain it with program)(he looked satisfied!)

Sir-do you know wat r link lists?write program?

Me-I wrote d program....(as I was bout 2 finish he said okok fine)

Sir looked very serious, he had a good accent, he talked in a very friendly manner helping the candidate 2 feel tensionfree...as it did 2 me!

After this phase was over .NOW I was confident that ill make it!!...i was sent 2 HR...

HR was cool:

Same old questionsà introduce urself

Family background,

Fathers occupation.....wat bout railways(as my fathr is in railway)

About siblings

Strengths(must prepare well! Speak loudly ,clearly n confidently with SMILE)u'll realize its IMP!)

Weakness(think beforehand if not abl 2 get it ask ur frns )

Hobbies(I told Writing,music ,dance -he asked wat kind of writing I said not on daily basis but I note down things I wud like 2 read later....few self composed poems n articles & newspaper cuttings etc etc.....)

He asked few mor ques regarding this....(I was ready with question like wich latest article u've written frm? Where? n wat pasted? n all)....asked few mor ques from Cv.. ...about relocation....about HCL foundation...jus checking communication skills......

&&& thanks to GOD......i made it......75 students got shortlisted....& it was a happy & most awaited moment 4 me.....now one more night excitement kept me awake!!!! So don't lose hope.....one day Is waiting for u to, for sure!!!.....just have confidence, smile & brush up ur skills as per requirement...go thru all papers ITZ VRY ^(100) IMP......

\*ALSO prepare ur seminar topic "Well"....they ask u if ur 6th sem is over!

\*do prepare a Subject of intrest...(for EC students Digital elec wil do OR microprocessor)

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\*rest even luck matters...Be genuine alwayz...(it reflects)

### HCL TECHNOLOGIES PAPER ON 31st JANUARY

I am Ankita Khandelwal pursuing B.Tech. From ASET, Bijwasan in instrumentation and control branch. I got placed in Hcl technologies through the campus placement in Amity, noida on 31st Jan '07.

The whole placement procedure goes like this:

There were three rounds: Written Technical HR

First there was a written round with two papers •Aptitude •Technical

The aptitude round had 45 questions each of 1 mark with no negative marking. The time limit was 60 min. The level was little tough with questions on logical reasoning, data interpretation and maths.

Then next paper was technical for 30 min with 25 questions of 1 mark each. The questions were on based on the concepts of c/c++, computer networks, operating systems, DBMS and data structures. The conceptual ones were easy but the output questions were of good level based on macros, bit wise operators, pointers and manipulators.

Second round was technical. The person sitting in the panel was very charming. He asked for the introduction and asked about the project I did after 4th semester. Then he asked me to write the program to check string for the palindrome. I couldn't write the program but I explained him the whole concept. In other panels interviewers were asking programs of sorting, searching, questions on output, errors, constructors destructors polymorphism, inheritance and concepts of OOP.

Final round was HR. There were two people. The lady asked about the family background, areas of interest, future plans, top 5 IT companies, top 5 B-schools, concepts of OOP, classes, technical skills, hobbies, knowledge about the company and other questions like:

•Why should we hire you?
•How you r different from other candidates?
•Why do u want to join this company?
•Which is your dream company?
•Are you comfortable with all the shifts?

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So this was the whole procedure. The main thing you need to take care is that you should show that you are confident, charming and have pleasant personality. Don't fumble, hesitate and scare...

#### **HCL PAPER Interview Questions**

PATTERN: WRITTEN TECHNICAL HR WRITTEN:

35 Aps question 20 Technical questions Aps was almost logical and one or two sums on quants. (Prepare logical deduction, blood relation, seating arrangements, pbs on ages, percentage, time and work, time and distance)

Technical was based on C, C++, and some questions on networks, os, and ds.

Had section wise cut off and negative marking...

TECHNICAL:

Why HCL? Questions on my area of interest. Difference bet TCP/UDP—and which is better? Whether tcp/udp is reliable? Asked to choose any one like C, C++, Java. I said C++ So, Num>>2(num value given and asked the o/p) A prog and its o/p. What is port.. Socket? Where we use port.. Inheritance and its types Polymorphism If extern is used within private what will happen. Types of networks. Extranet? Using static, extern keywords many questions were asked... My technical round was abt half an hour. But I am not selected. So, I couldn't give u HR guestions..

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# HCL PAPER ON 29th JUNE AT CHENNAI 2007

Hi friends....This is Dinesh here ... I m from (Computer science) .... I got placed in HCL yesterday (Yahooo!!!!!)

Before I tell about all the procedure 1 thing I would like to say to u all that placement is 90% luck and 10% preparation....and confidence is the key of ur luck.....b4 HCL I appeared in cts and wipro...but my luck did'nt click out....but here in hcl it was my day...

In my collage they came up with a new procedure.....First we had a online exam(don't worry thay II give u proper instructions) which was aptitude test cum technical interview.....out of around 700 students 163 cleared the test and were directly called for hr interview....where totally 61 were selected...

In the test there was a first question paper (50 min 60 question) containing aptitude, English , general computing knowledge, DI .....etc. ....the level of questions was average

Some of the questions which I remember are----"a person who loves his country is called"-----ans=patriotic

Question releted to blood relation, age, number series, mirror image, coding decoading, grammer correction, meaning of word, work time, in DI bar chart graph etc....

I think a score of 35 out of 60 would be more than sufficient. There was no negative marking....i marked all the questions in the end....

The second question paper was divided in three ways

1 paper for cse guys.....1 for it guys.....and third one 4 remaining branches.....for other branches (other than cse it) the second paper did'nt contribute to get into hr round.....other branch students had only 10 questions of c in their technical test...

For me as being a cse student in the tech test there were 3 portions.... 10 ques of C++, 10 ques of data structure, 5 ques of C.... I found it a bit tough...

Some of the questions that I remember are... A is friend class of B so A can access ......

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A node in link list has.....Ans was....data field and address of next node.... One program was written and we were suppose to recognize whether it was pre order traversal of post order traversal.....

Printf("%c", 7["sundrams'])

One question related to pointers

In which of the following data structure we may gat a error message "array overflow" even the array is not full.....the ans is ...circular q (I think so)..... 2 question related to graph.....

While preparation concentrate on concepts...

Next day I had my hr interview.....b4 hr interview there was ppt( listen properly). I was asked general hr questions. .they just check whether u can open ur mouth or no...and ur level of confidence.....it lasted for 7-8 mins.....he was convinced with my answers.....

One of my frnd was asked.....if ur boss is cyco what will u do??? .....he answered "I II continue....."

Hr said what's the need to continue????? so b ready for some absurd questions also....they just read ur face expressions

so guys its all about my placement story.....my advice for u is to be well prepared , believe in urself, pray to god.....

# HCL PAPER ON 28th JUNE 2007

I m Sam Daniel from Panimalar Engg. College doing my final year B.Tech(IT). We got our HCL interview on 28.06.07 at sathyabama deemed university.

Aptitude is an online round. There were only 2 rounds for us.

1.Aptitude(2 Apps for IT and CSE)

- a. General aptitude(60 que in 50 min)
- b. Technical Aptitude(Data Structures,C,OS)[25 que in 20 min]

2.HR(General)

In General Aptitude there were questions based on the following:

LAT(Learnability Aptitude Test)

1.two on blood realations

2.6 reading comprehension (hint: See the question given below there will be a direct answer. If u are not sure then just click at random mostly b or c.)3.one train problem(i just bypassed it)

4.computing values based on flowcharts(very easy, Be carefull simple decision boxes were given)

5.Using Bar Charts to answer the questions.Easy one.

6.One correct the sentence question was also asked.

Others i couldnt remember, but easy one. Be Quick in answering them.

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```
Technical Aptitude Test(CSE & IT)
1. 5 small logical situations in C
1.----> int (*ptr)[10] What it means ?
2.----> Program based on printf arguments...
printf(+7"%c","sundaram"); o/p ?
3.---->program with post and pre increment situation
int count=0;
int incre()
{
return count++;
}
main()
{
int arr[10];
arr[count++]=incre();
printf("%d%d",arr[count],count++);
}
4.Two choose the correct option
```

2.Data Structures:

1.\_\_\_\_\_ Queue has a overflow problem even if there a few elements present.

2.Two questions about graphs and trees.. simple one.

3. Which sorting is optimum even in worst case...

1. quick 2. Insert 3. Merge 4.8yrs.

4. One simple question related to stack. Others I forgot..

3.Os:

1.questions on sheduling

2.On swapping \_\_\_\_\_\_is used to implement virtual memory.

3.\_\_\_\_\_is used to allocate contigious memory locations.

4. One on Assembly level programming

5.Semaphores are used for\_

6. Modulation in modem(0,1) to (0,2).

Next Day we attended HR

I was to attend the 13th pannel and it was an lady HR. She asked some general questions no technical and this session moved so friendly.

1. Introduce myself.

2. Some cross questions from the first que..

3. About my specality..

4. She asked the difference b/w school life and coll life.

i said and included that both were same and also included about the rules on talking with girls. She asked me to justify it. I gave an ans as " depends on the situation and persons". Think so she was satisfied.

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5. Asked about my hobbies. I said playing volley ball on sundays and spent more time in computers in week days.

6.Asked about my strengths and i said it with an incident to add value to that point.

7. Asked me about the lase movie i saw. I said i dont see movies often and she was ok with it .

8.She asked for Higher Studies...please say No..

9.Asked about working abroad. I accepetd it with a big smile and said not only abroad accross any where in india too. She asked me that reason.. I said that i can increase my Linguistic Profeciency and can analyse myself with other state people and can learn more. She was really satisfied with it.

10. About the bond for 18 months and i gave a big hopeful smile for that too.

Thank god i got selected.. Friends be confident and communicate well and express your leadership qualities whenever possible. I prayed to god to get this oppourtunity and i think he accepted it.

HCL INTERVIEW ON 25th JULY AT COIMBATORE 2007

Hi friends..me wanted to share the interview experiance with HCL. first v had aptitude test

1) General apti test

2) Technical paper( asked in computer networks, unix and c) and a harware technical paper for those who are interested in that. i wrote only for software test..

Those who r shortlisted in aptitude test are called for the interview on the next day.

We had two rounds of Interview 1) Technical 2)H.R

Technical:

only one interviewer in the panel..i m an ECE student and my area of interest in microprocessor 8085. so following questions are asked for me..

1) Introduce yourself

2)Tell me about your projects done so far

3)What s a pointer and write a program to print the address of that variable.

4)How to access a pointer using structure and write a program using that

5)What s the difference between structure and union

6)Write a program using union

7)What are the advantages of pointer

8)Whats a static variable

9)What s a micro controller and the difference between microprocessor and microcontroller

Get latest Fresher / Experienced Engineering Jobs at <u>www.123eng.com</u> For More Placement Papers visit <u>www.123eng.com</u> Page 206 of 214 10)Tell me the major advantages of microcontroller compared to microprocessor HR Interview: female HR came to our panel.. she asked the questions so fastly and didnt wait to answer the questions fully. .I didnt expect that she II ask technical questions in HR interview.. so BE READY FOR ANYTHING

She gave a c program and asked the output, then asked whats a pointer 1)What s ur aspiration? 2) Why HCL and wat do u know about HCL? 3) About family background...

Then within 30 minutes they announced the result. I m selected in HCL finally...

HCL Paper

We wer called by the hcl technologies for recuritment in their office only. The written papre consisted of 2 sections 1-apptitude 2-branch specific. Apti paper was damn easy.thr wer 60 questions to b done in 55 minutes.no special practice reqired 4 ths.

Kep ur eyes open mind alert and chck on the time.thts it Some of the questions wer:-

1 if a+b means a is son of b and a-b means a is daughter of b and a\*b means a is wife of b thn

p+q-r\*t.wat is the relation between p&t?

2 english Rc.very easy one.4 passeges having 10 questions.

3 flow chart questions.thr wer 6 questions on flow chart.

4 pie chart question. Tht is the di section. u dnt even need to use ur pencil 4 solvin it

5 some technical questions like how s virtual memory implementeddemand paging

1) question was on article whose option wer a,a & a,the &the,a & the,the.the answer was the,the

two meaning question wer thr whose answer wer mass killing and formal statement.

Analogy question wer thr like:-

(analogy:bmbkpfz) and 4 option wer given the relations 4 analogies wer quite simple as u can see.

Number series wer given like 122433566412864278 and question wer asked like hw many consecutive even number pairs

Are thr whose sum is a single digit ie >= 9;

All the question wer easy.jst keep the chk on the time

The second test was branch specific.each 4 computer, it and of vlsi 4 electronics students if thy want to be vlsi specialsts.

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Mine was computer test.it was a little bit tricky bt surely not difficult. Thr wer 25 questions to b done in 20 minutes

Questions wer on c and c++ only.some of the questions i could recall wer 1-wat s the position of partition item in quick sort ansis statrtin(first) The new malloc calloc allocate memory 4m heap One question was on virtual base class in c++.type of error was asked bt thr was no error One question on 2d array. Some questions on c programs.one was insertion sort One on binary search tree On question on the preorder sequencing of b tree.ie 1st visit root thn visit left subtree in preorder Again u need to keep a chk on time here also. Thn finally thr was HR round Same questions wer asked 4m each student and those wer vry vry general. The questions wer 1-tell about urself 2-about family 3-why hcl? 4-academics trend i.e if ur % is decreasing thn why is it so and if its increasing thn will u b able keep it like tht?

It dint last 4 mre thn 10 minutes.

# HCL PAPER ON 9th JULY AT CHENNAI 2007

Hi frnds SANKAR here from st.joseph's coll of engg.....hcl came to our coll for campus recrutmnt on 9th july. I like to thanks fresher world from were I got all the information's needed for me.....!

Hcl consists of 2 round

- General aptitude. + Technical.
- H.R round.

First to aptitude....

it seems hcl changes pattern for every coll...as they wish, For us it was a Online test.....80 general questions 60 mins

Its very easy any student can crack it.....it consisted of 4 sections

Each 15mins.....its not verbal n not quants its some thing different....!

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Consisted of Data interpretation, match the correct grammar n match the correct. Data interpretation was very easy it is not maths. Grammar its generally making spelling, commas, corrections in the given test. Its generally Eye checking test.....u will have to find small mistakes in it.....u will have to c every word n sentence properly.....

Eg:- consultant, consultant, consultant etc....

Like this only it will b very easy.....

Match the correct..... 2 statements will b given u have to check weather both matches r not.....its too very easy..... Eg:- alexraja@gmail.com alexrraja@gmail.com. #^\*4454834969966996 #^\*4454834966966996.

Any one with good eye sight can crack this easily....only one is every thing would look similar u identify the wrong one....!

About Online test first thing is tat u have to ans the question tat comes on the screen if u skip it u cannot b able to go back n review the questns once answered is answered u cannot change it when u go from that page....n in 4 sections they will a lot 15mins for 20 questns...do as much fast as u can.....

Technical:-Its fully "C"

It's the toughest part in the test....

Any one with good basic knowledge can crack it.....

Be through in all the concepts....espl

Structures

Pointers

Expressions

You would have to correct the error in the given code....like What will u do to correct this linking error...runtime error...etc. So well prepare in c concepts....!! In my college, 350+ wrote the exam n 148 cleared it....! They announced the result 3hrs later....at 6.30pm.

#### Next the H.R round:

This is a rejection round u shod b very careful in attending this for me my H.R was so sweet......

So I was able to speak properly they generally check ur communication skills n confidence the way u behave they could judge u frm the way u sit b4 them.....!!! So don't be arrogant don't argue with him don't contradict Wat they say....be polite tats enough.

I attended the interview at 9.30pm they announced the result 2 days l8r only....only 45 were selected out of 148.

Thank god, I am one among them...! Pray to god he will help you.....!

# HCL PAPER ON 7th JULY 2007

Hi guys ,i would like to share something about HCL placement procedure ,in which i got placed. there is online test which is of 55 min

the online test consists of

a total 60 general aptitude questions and 25 questions on technical for only computer science and an optional 10 questions on c for all non IT optional in the sence there is no compulsion in atteding the c questions there are any how not to be counted but if attempted some plus point in interview

only personel hr round numerical questions 10 ex :which is greater in 4\*2<sup>1</sup>/<sub>2</sub>,3+5<sup>1</sup>/<sub>4</sub>, arthmetical reasoning 10 questions flow charts 10 computer algorithms 10 english 15 questions for non IT guys 70 questions in 55min ,for cse or IT 85 questions in 70 min

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for every section there is cut off so u should maintain time to attempt atleast 4 questions right from each section ,the question paper is medium if u do r.s aggarwal u can have idea to do well , there are 2 to 3 questions in english alphabet coding that is like if abcde is bcdef what will ijklmn represent like this questions ,and flow charts, that is one flow chrt is given and below 5 question s are given according to flow chart u have calculate ome values and nswer questions,and also pie chart questions also given better to stuy r.s aggarwal or gre barrons,and in english passages 2to 3 passages, correction of sentences ,filling the suitable articles ie., a,the,an

what all u should see is u go on answering the questiong suppose if know 1st question try to solve and answer don't know guss and attempt any fluke ,dont think again u wiill not have time to come to ist question.any how no negative marking

ok i have done well and cleared written and attended the interview which is very formal like they asked tell about details percentage,family background and with god's grace and luck i have selected in HCL be confident in interview try to answer questions with smiling face

HCL QUESTION PATTERN 2007(MADURAI KAMARAJ UNIVERSITY)

Hcl had visited in our campus at 5th sep 2007 so they had given the following Question pattern

It consist of 2 part.

In first part they had given 60 Aptitude ques and time duration for that was 45 min

In the second section it was fully Technical part, in that part 20 ques consist 4m C Apit only and the time duration for that was 15 min

NO Negative marking for any part .

In the first part consist of 4 section, every section had 15 ques

First section-Analogy-5, G.P series- 2,(+,-\*,/) 4 ques on this basis it was some wat difficult e.g -2\*3+4-5=14 and 4 option for that (i)+,- (ii)+,/ (iii)\*,/ (iv)/,+

And the last 4 question which one is similar for that series

e.g- 64,125,216,343

(i)500(ii)600)(iii)512(iv)612

Second section-complete series-5 they had given 5 number in between that one blank so we have to identified wat is that number e.g - 12, 16, 20, 22 it was not so easy, and 5 ,and coding-decoding- 5 ques it was easy,one puzzle of sitting arrangement it was easy in that 6 person sat in a row in the face of east side in that it had given 4 information on basis of that we have to sat.

Third section- alphabet-5 ques,e.g what is the same alphabet on that word Confidence,1 data-Interpetion ,it was bar-graph on the basis of they had given 5 ques it was also easy,and last 5 ques I didn't remember.

Fourth Section- it was fully English section, in that first 5 ques from grammar mistake, they had given 4 similar type of sentence and u have to find correct sentence, 3 ques from antonyms and 4 ques 4m synonyms and last 3 ques was fill up we had to fill correct form of verb in that sentence

That's all for the first part

Second part

It was 20 ques of c-apti and time duration was 15 min so in that section they had asked basic ques of c, so clear through basic concepts that sufficient, I hadn't remember the ques but some ques was easy and some what was difficult.....

Totally 307 student had sat for written and 119 got qualified written,out of 119 student 52 student are finally selected I was also lucky that my name was also in that

In interview it was fully HR ROUND

The ques asked 4m me was

i)Tell me abt urself?

ii)They had asked how you had joined this coll?

iii)Asked abt my native what is famous in ur native?

iv)My subject of intrest was oops so they had asked wat is oops with real time example?

v) They had asked data encapsulation of real time example?

vi)Do u have any relocation problem?

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vii)Service bond for one and half year?

viii)Will you go for higher studies?

so mainly they had checked ur communication skill and confidence this is very important so be confident at the time....

Then defentely u will selected.....

# HCL Paper 04 August 2007(New Delhi)

Hi Friends...

I m Sarandeep. Rite now m pursuing my B.tech from GTBIT (GGSIPU) in ECE (4th yr). The HCL tech written paper was held on 4th August, 2007 at MSIT, Delhi and Interview was held on 24th August..

There was 1 written paper and HR Interview.

WRITTEN PAPER.

1Aptitude (Common to all)

There were total 60 questions. No negative marking. Time Limit: 50 mins

Ques on Bar chart, Reading Comprehension, Data Interpretation, Q.A, Data Sufficiency/Insufficiency, Puzzle Test, Basic computing knowledge, Flow charts, Microprocessor etc....

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2Technical Paper (For CS/IT)

There were total 25 questions Time Limit: 20 mins Ques on C, C++, DBMS and Data structures.

**3HR INTERVIEW** 

Basic HR ques that were asked:-

- 1.) Your Introduction?
- 2.) Your objective?
- 3.) Tell me something about your family? (This is their favorite question so prepare it well)
- 4.) Why HCL?

5.) If you are already placed in another company, then why HCL over that company?

- 6.) What do u know about HCL?.(www.hcltech.com and PPT)
- 7.) Incidents in support of all that u have mentioned in C.V? (V.imp)
- 8.) How are you different than other candidates? Why should we recruit you?
- 9.) What's unique about you?
- 10.)Any plans for higher studies? (Big No!!!!)

11.) Any Problem in Relocation? (Strict no no.).

12.)Your Hobbies, Interests, Strengths and Weaknesses, some other ques from C.V.

13.) One thing that irritates you the most and why?

14.) You may need to explain your projects also.

15.) Do you want to ask something from me? (Prepare a good question as not asking any question shows serious disinterest towards company, plz don't ask that's already told in the presentation. You can also say that "I m fully satisfied with the presentation")

FINALLY, the statistics.

Around 250 students gave the Paper.

Around 150 cleared the written.

And finally, around 80 were selected.

And by the grace of God, I got selected.