

# HCL Placement Paper 2

HCL TECHNOLOGIES

Q) Piggy backing is a technique for  
a) Flow control b) sequence c) Acknowledgement d) retransmission  
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 fields 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 employe no. group by 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 field customer no. you can see  
a) delete from customer where customer no. exists  
( select distinct customer no. from customer having count )  
b) delete customer a where customer no. in  
b rowid  
c) delete customer a where customer 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)  $x=2, y=6, z=6$   
 $x=y=z;$   
 $\text{printf}(\%d, x) ?$

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 occur

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 occurred  
(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 qp.

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

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 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()  
{  
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 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) 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 the 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)
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(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
```

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

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;  
float 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

- (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 employees 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%

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?

- 1) Each of 3 faces of C is exactly  $\frac{1}{2}$  red
- 2) 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  $\frac{1}{5}$  mile  
and Rs  
0.20  
for each  $\frac{1}{5}$  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