## HCL TECHNOLOGIES PAPER - 16 OCT 2005-CHENNAI

1. How many segment registers are there in the 8086 processor?
a) 4 b) 6 c) 8 d) none

Ans: a
2. What is the addressing mode of this instruction MOV AL, $[\mathrm{BX}]$;
a) direct addressing mode
b) register indirect addressing mode

ANS: b I am not sure of it.
3. What is the type of file system used in the CD ROM?
a) VFAT B)
4) About CPU I think but answer is DMA.
5) If we double the clock speed, then?
a) It increases the speed of the processor b) It increases the speed of the system bus c) both of the above D) None
6) Data recovery is done in which layer?
a) physical b) datalink c) network d) transport
7) What is thrashing?

ANS: swapping in and out the pages frequently from memory.
8) By using 3 nodes how many trees can be formed?

ANS:5
9) They give one tree, and ask the post order traversal for that tree?

ANS:C
10) Page cannibalation is?

ANS:C
Aptitude section:

1) They give one scenario and ask questions on that. that is easy. Those are 5 questions.
2) They ask 2 questions in English, I didn't answer those ones. They are - Find the odd one?
3) They give 2 questions on missing digits. They $r$ matrix type, I didn't remember the questions, But I know answers.
for first one 8 . For second one 28 is the answer.
4)Two persons start walking from the same place in opposite directions. After walking for 4 mts , both of them take the left and walk for another 3 mts . Then what is the distance $\mathrm{b} / \mathrm{w}$ them?

Ans: 10 mt .
5)One person start from his home towards college which is 53 km far away. Another person started from college towards home after an hour. the speed of first one is 4 kmph and the second one is 3 kmph . Then, what is the distance from home to their meeting point?
AND: 21 km .
6)3 machines can complete the work in 4,5 , and 6 hours respectively. due to power failures they did the work alternatively. Then what is time taken to complete the work?
ANS:9/20
7)Two persons take the pair of dies and throws them. If 12 appers first one wins, If two consecutives 7 s appear then second one wins. What is the probability to win first one in the game?
a) $6 / 15$ b) $3 / 13$ c) $2 / 13$
8)Two questions on figures .They give five figures , and change them sequentially, $u$ have to find 6 th one. They give 4 choices.
9)one more Q . on number sequence.

C Programming:

1) what is name of the operator in passing variable no. of arguments to function?

ANS: Ellipsis

```
2) main()
    {
    printf("%d%d"size of ("Hcl
    technologies"),strlen("HCL Technologies"));
    }
a)16 16 b)16 17 c)17 17 d)17 16
3) main()
{
char arr[]={ 'a','b','\n',....}
some more instructions;
}
ANS:77
4) main()
{
int arr[]={0,1,2,3,4)
int *a={arr, arr+1,arr +2,\ldots}
int **p=a;
p++;
```

some instructions:
\}

## ANS: 111

5)They give one $Q$ on 3-d array?

ANS:4
6)one Question on ++ and \&\& operators.

ANS:1,0,0
7)one question on logical operators

Ans:1 001
8) one question on the return value of scanf function?

ANS: 1

## ANALYSIS OF PROGRAMS:

1) For one $Q$. they make the constructor in the base class as virtual and give the big program. So, for that one ANSWER is NONE, (d).
2) In one $Q$. They give the prototype of the function that structure as argument .But, Structure is defined after that and they give the program.
ANS: ERROR
3) for one Q. They give the answers as $4444,7777,9999$.But, the answer is 6666 . So, Answer is None (d).
