

HCL PAPER

This paper has two sections, A & B. Section A has 50 questions (one mark each) and section B has 10 questions

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 question -> 2 marks

-ve marks: -1

Section IV: Analytical Q.20 each question -> 2 marks.

-ve marks: -1/4

Murthy from each section I am giving one are to questions also because for checking whether the same paper or not.

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

Section-I

1). Piggy backing is a technique for

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

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

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 protocol in network and windows system

12) b has to be unique in the sub network

13) 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 employee A, where exists from employee B where A employe no. >= B employe having (count(*) mod n)=0

b) select employe no. from employee A, employee 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

14) 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

(select customer b where customer no. equal to b customer no.) and a rowid >

b rowid

c) delete customer a where customer no. in

(select customer no. from customer a, customer b)

d) none of the above

15) c Volatile modifier

----- Section I over with 15 questions -----

SECTION-II

Section II is not covered completely But it is very very easy. You can do it very easily.

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 (question 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 = $10 \times 6 \times 60 / 4 = 900$ ans: (a)

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

8. $100(100000000+100000000)/10000 = 2 \times 1000000$ (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 occurred

(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:

e
a
c
a
e

----- over -----

BEST OF LUCK

In written test in each section you have to get minimum marks i.e you have to pass in each section. There will be questions from C, C++, JAVA. about 10 questions in C++ in the written test.

(2 marks each). There is negative marking. Some of the questions are given below. =

NEWGEN PAPER

1. root class in MFC is
(confirm it)CWnd or CObject
2. what is protocol used in email
ans-SMTP
3. SMTP is used in which field
4. garbage collector is used in which language
ans-java
5. virtual memory is
ans-illusion of extended primary memory
6. =

```
void main()
{
int a[3]={1,2,3}
int i=0
a[++i]=3Da[++i]+i;
printf("%d,%d "a[i],i);
} =
```

```
7.void main()
{
int x=3D0,y=3D1,z=3D2;
printf("%d%d%d",++x+++y,--y+z,--z);
}
```

8.CEO of Microsoft

ans--steve ballmer

9.2NF contains ---

10.how many swapping are used to sort to sort following =

bubble sort

8,7,22,12,31,1,3,5(data is not accurate but answer =

is right)in assending order

ans--14

11.in hash search what is the complexity

ans--o(1)

12.transference of data during process to =

secondary memory is

ans--swapping

13.friend class can access

ans--both public and private

14.hamming code is related to

ans--error correction =

15.determine the number of page faults when references
to pages occur in the following order

1,2,4,2,1,2,4.Assume that the main memory =

can accomodate 3 pages and the main memory already
has the pages 1 and 2,with page 1 having =

been brought earlier than page 2.

ans--4.

16. Quad-Compact cdrom drive approx. completely read in =

a) 10 min. b) 18 min c) 25 min d) 30 min =

ans: b (may b)

17.indexing is useful in =

ans -- d part

18.when we enlarge picture what changes

ans--bits per pixel change

19.32x,48x,52x stand for

ans--rotation speed per second

20.mismatch of CPU & memory speed is removed by

ans--caching

21.101010101 decimal equivalent ans (1365)

22.first step of creating windows in window programming
environment

ans--registering windowclass

23.to draw the reverse of a tree what second is made by inorder

ans--preorder and inorder

24.ethernet speed range

ans--100Mbps(make it sure)

25.which of the following related to the transaction

ans--(d)

26.dead lock

a.non-preemptive

b.mutually exclusive

c.circular wait

d.hold and wait

ans (all of the above)

27.in a company ethernet and LAN both are established =

and people get =

disimilar date from these what is route cause

a.router b.bridge c.gateway d) repeater

28.extensive fragmentation occurs in

ans-- segmentation

29.what is the complexity of an n element linked list

ans--o(n)

30.if u add a new device drivers on unix system what =

you have to recompile.

ans--kernel =

31. Signature is(study it)

a) method name b) no. of parameters c) parameter type d)return type

e) description of -----

options are :

i) a,b,c ii) a,d,e, iii) a only iv) all of the above

32. BSC is

a) full duplex type b) ---- c)--- d) ----

33.# include<stdio.h>

main()

int i=3D -2,j=3D -5;

f(i) { i=3D i*i};

g(j) {j=3D j*j};

printf("%d,%d",i,j);

In f() : pass by value , In g() : pass by reference

ans: i=3D-2, j=3D25

34. First O.S. used in microprocessor

a) Zenix b) ms-dos c) CP / M d) ----

ans b (make sure)

35. In ethernet which of the following is used

a) MSP b) SMTP c) X 4.00 d) X 5.00

ans : c (make sure)

36. class test

{

static int x;

public static void main(string args[])

{ system.out.println (value of x or +x);

}}

a) x=3D0 b) -- c) -- d) ---

37.Segmetation is =

a) b) c) d)

38. In virtual memory used =

a) segmentation b) paging c) demand paging d) --- =

ans : c =

=

some programs of c from "pointers in c"(YKanitkar) =

couple of java programs asking the outputs.

one or two question of virtual function in c++. =

HERE ARE FEW QUESTIONS FROM NEWGEN'S PAPER-2000 (IET ,LKO)

PAPER CONSISTED OF TWO SECTIONS (45 QUESTIONS + 15 QUESTION)

1. WHAT IS BAUD RATE?

2. CORBA IS OWNED BY WHICH COMPANY

3. PAGE REPLACEMENT TECHNIQUE IN WHICH PAGE FAULT INCREASES ON INCREASING THE MAIN MEMORY?-----FIFO

4. CGI can be written in
---perl

5. In which normalised form repetition is avoided

- a)1nf
- b)2nf
- c)bcnf
- d)3nf

6. paging is used for
ans--to remove external fragmentation

7. Round robin is the pre-emptive version of
ans--fifo

8. constructor in c++ has
a)no return value

- b)void reurn value
- c)int " "
- d)char " "

9. which system program sets the executable file ready in the main memory

- a)linker
- b)loader
- c)--
- d)---

10. which is the timer system call

- a)8279
- b)8251
- etc.

11. In bus topology if a m/c goes down what will happen

12. client sends to server

- ans-a)request
- b)demand
- etc.

13. no. of ordered tree that can be made out three nodes a,b,c

14. which on e of the folowing is completely hardware

- a)router
- b)bridges
- c)repeater
- d)none

15. garbage collector is used in which language

ans--java

16. which is resposble for maping the logical address to the physical address in the main memory

ans ---memory management unit

17. output of the following program

```
#define square(x) x*x
main()
{
    int a,b=2;
    printf("%d",square(b+3));
}
```

ans --11

18. output

```
main()
{
    int i;
```

```

----
----
for(;;)
{
----
----
    printf("*");
}

```

ans --infinite loop

19. Round robin is used for -----process scheduling

20. Semaphore is used for

ans --

CMC(LAST YEARS)

Q:there are six steps that lead from the 1 to 2 floor,

no two people can be on the same step:-

a is 2 steps below c

b is a step next to d

only 1 step is vacant(denote first step as 1 and second as 2)

1:if a is on step 1:which is true?

a)b is on 2

b)c is on 4

c)a person c may be on the 3 step

*d)d is on higher step than c

2:if e was on step3 & b was on a higher step than e:which step is vacant

*a)step1

b)step2

c)step4

d)step5

e)step6

3:if b was on step 1 which step could a be on?

a)2 & 3 only

b)3 & 5 only

*c)3 & 4 only

d)4 & 5 only

e)2 & 4 only

4:if there were 2 steps b/w the steps that a was standing and the step that b was standing on and a was on a higher step than d. a must be on steps?

a)2

b)3

*c)4

d)5

e)6

5:which is false?

*i.b & d can be both on odd no steps in one configuration

ii.in a particular configuration a & c must either both an odd no steps or both on even no steps

iii.e can be on a step next to a vacant step

a)1 only

b)2 only

c)3 only

SWIMMERS PROBLEM

six swimmers A B C D E F compete in a race.there are no ties.Outcome are

1.B does not win

2.only 2 swimmers separate E & D

3.A is behind D & E

4.B is ahead of E with one swimmer intervening

5.F is ahead of D

[F D B C E A][1 ... 6]

6:who is fifth?

a)A

b)B

c)C

d)D

*e)E

7:A and F separated { *d)4 }

8:swimmers b/w C & E { none }

9:in the end of the race swimmer D is disqualified then B finishes in {second place }

CHIMNEY PROBLEM

five houses lettered A B C D E are built in a row next to each other. the houses are lined up in the order A B C D E ,each of the five houses have colored chimney the roof and chimney of each house must be painted as follows

1.the roof is with Green Red Yellow

2.the chimney must be White Black or Red

3.no house may have same color of chimney as the roof

4.no house uses the color the very next house uses

5.E has Green roof

6.B has a Red roof & Black chim

10:which is true

a)at least two have black chimney

b)at least two have red roof

*c)at least two have white chimney

d)at least two houses have green roof

e)at least two have yellow roof

11:which is false

a)A has yellow roof

*b)A and C have diff color chim

c)D has a black chim

d)E has white chim

e) B and D have same color roof

12: If house c has yellow roof, which must be true ?

- *a) e has white chimney
- b) e has black chimney
- c) e has red chimney
- d) d has red chimney
- e) c has black chimney

13: Which possible combination of roof & chimney can house

1. A red roof & black chimney
2. A yellow roof & red chimney
3. A yellow roof & black chimney

- a) 1 only
- b) 2 only
- c) 3 only
- d) 1 & 2 only
- *e) 1 & 2 & 3

14: What is the maximum total no. of green roofs for houses.

Ans : (c) < A C E > 3

15: There are six red

16: What is the selling price of can cost selling price of .. cost .. is

Rs 60, 10% profit over selling price ? Ans: 66

17: $\frac{1}{3}$ of girls and $\frac{1}{2}$ of boys go to canteen. What factor & total no. of class mates go to canteen.

Ans : cannot be determined.

18: Price of product is reduced by 30%. What % should be increased to make it

100 % ? Ans : 42.57%

19: There is square of side 6 cm. A circle is inscribed inside the square

Find the ratio of area of circle to the square. Ans: $\frac{11}{14}$

20: Two candles of equal lengths and different thickness are there. The thicker one lasts 6 hrs, the thinner 2 hrs less than thicker. Ramesh lit the two candles at same time, when he went to bed he saw that thicker one is twice the length of thinner one. For how long Ramesh lit the candles. Ans: 3 hrs.

21: $\frac{M}{N} = \frac{6}{5}$, $3M + 2N = ?$ Ans: cannot be determined.

22: $\frac{P}{Q} = \frac{5}{4}$, $2P + Q = ?$ Ans : cannot be determined.

23: If PQRS is a parallelogram. What is the ratio triangle PQS & PQRST.

Ans: 1:2.

24: Cost of an item is Rs 12.60, profit is 10% over selling price.

Ans : 13.86

25: There are six red shoes & 4 green shoes. If two of the shoes are drawn. What is the probability of getting two red shoes.

Ans: 602/1002

26: 15 lit of water containing 20 % of alcohol ,then added 5 lit of water .
What is the % of alcohol?

Ans : 15%

27: A worker pay Rs20 a day ,he works $1\frac{1}{3}, 2\frac{2}{3}, 1\frac{1}{8}, 3\frac{3}{4}$ in a week.
What is the total amount paid to the worker.

Ans: Rs 57.50

28: The value of x is between 0 & 1 .Which is larger?

- a) x
- b) x^2
- c) -x
- d) $\frac{1}{x}$

Ans : d

DATA SUFFICIENCY

- (A) 1 alone sufficient.
- (B) 2 alone sufficient.
- (C) Both together are sufficient.
- (D) 1 alone & 2 alone sufficient.
- (E) Information insufficient.

1: A man 6 ft tall &

2: Two pipes A & B empty in to a reservoir. Pipe A can fill in 30 min alone.
How long will it take for pipe A & B together to fill.

- 1) by itself b can fill reservoir in 20 min.
- 2) pipe b has larger cross section area than pipe a.

Ans: (A)

3: k is an integer , is k divisible by 12?

- 1. k is divisible by 4.
- 2. k is divisible by 3.

ans: (C)

4: how far is it from a to b

- 1. 15 miles from a to c
- 2. 25 miles from c to b

ans: (E)

5: was melissa brown's novel published

- 1. if melissa brown's novel was published she would receive 1000/=
- 2. melissa brown's income was over 1000/=

ans: (E)

6: does every bird fly

- 1. tigers do not fly
- 2. ostrich do not fly

ans: (B)

7: how much does john weigh

- 1. jim weigh 200 pounds

2.tom' s weigh plus mary weigh=johns weigh
ans:(C)

8:in the figure ABCD

ans:(E)

9:find $x+2y$
1. $x+y=10$
2. $2x+4y=20$
ans:(B)

10:is $\angle BAC$ a rt angle
1. $x=2y$ $|y|$
2. $y=1$ $|$
 $|x|$
 $|$

ans:(E)

11:is $x>y$?
1. $x=...$
2. $x=2$
ans:(E)

12:a piece of string 6' long is cut into three pieces.how long
is the longest thread
1.two pieces are of same length
2.one piece is 3' 2"
ans:(B)

13:how many rolls of wallpaper are necessary to cover the walls of a
room whose floor and ceiling are rectangle 12' wide & 15' long
1.a roll of paper covers 20 sq ft
2.there are no windows in the wall
ans:(E)

14: x and y are integers that are both less than 10. is $x>y$?
1 x is multiple of 3
2 y is multiple of 2
ans:(E)

15:50 students have signed up for at least one of the course , German
and english how many of the 50 students are taking german but not english
1.10 students are taking german & english
2.the no of students taking english but not german is the same as the no of
students
taking german
ans:(C)