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CTS '99
Pondicherry
SECTION I - 8 questions.
Series.
    Interchange of letters in a word and the adjacent letters are als
1.
to
be changed. given letters series like [also few condotions]
 AAABBB=
 ABABAB=
LET QUESTION IS ABBAAB
       If we apply 25 on this it means we have to interchange the
letters
at positions 2 and 5, and we have to change the adjacent letters 2 and
from A to B and B to A.
That is q's A B B A A B
  after Step 1 i.e interchange 2 and 5.
 now change adjacent elements of 2 and 5...finally answer becomes
       BAABBA
//Hint: As per question papers 5 questions above like but numbers
change.
REMAINING 3 QUESTIONS:
 6. To get AAABBD from BBBAAA what ot apply:-
 a) 25 b) 34 c) 25 & 34 d) none
SECTION II
1. Given the function f(n \ a \ b \ c) = ac \ if \ n=1
       f(n a b c) = f(n-1 a b c) + f(1 a b c) + f(n-1 b a c)
                       if n >
       f(2) = ?
Ans: f(2acb) = ab + ac + bc.
2. similar question in functions.
3. [ based on function in 1.] f(4 a b c) the number of terms
is...?
Ans: f(4abc) = f(3acb) + f(1abc) + f(3bac) etc.
          = 5ab + 5ac + 5bc.
4. f(5abc) = ?
SECTION III
Permutations and Combinations.
8 questions.
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1. r = number of flags;
  n = number of poles;
  Any number of flags can be accommodated on any single pole.
      r=5, n=5 The no. of ways the flags can be arranged?
ii) to iv) are based on this.
6. r=5 n=3 . If first pole has 2 flags , third pole has 1 flag
  how many ways the remaining can be arranged?
7.& 8. same as above.
SECTION IV
Question consising of figures consist of 4 small squares and every
square
having an arrow pointing in one Direction.
GRE test of reasoning.
hint: What is the next sequence if we tilt the figure by 90 degrees
like
that (clockwise and mirror images?).
SECTION V
In this section first part of compound word is given. Select meaning o
the second part from the choice given:
        1. Swan
        2. Swans
        3. Fool
        4. Fools
        5. Stare
        6. Lady
 For all above 4 choices are given....
Eq. Swan
 a) category b) music c) --- d) none
Ans: Swansong is compound word. But song is not given as option. so
    b) music is answer.
TS 99 PAPER .
*This paper contains 40 questions and time is 60mts.*/
CTS -REC'99 (TRICHY)
SECTION-1:
Find the sequence:
   d is always NONE
                             )
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1. BC
       CE EG
                GK ?
        a)KN
                 b)KU
                          c)KM
                                   d)
2. AA
       AB
           BC
                CE?
        a)EG
                 b)EH
                          c)EI
                                   d)
3. AB
       EF
           JK
                QR ?
        a)YZ
                 b)ZA
                          c) AB
                                   d)
4.ACD
       EGL IKT MOB?
        a) QST
                 b)QSZ
                          c)QSY
                                   d)
5.AC CG GO OE?
        a)EJ
                 b)EI
                          c)EL
                                   d)
6.AE BH CM DU?
        a)EH
                  b)EZ
                          c) EB
                                   d)
7. AD DP PL LV
        a) VS
                  b) VK
                          c)VI
                                   d)
8. SE QU EN TI?
        a)CN
                 b)BM
                          c) AI or AZ
                                         d)
```

SECTION-II:

FIND THE VALUES FOR FOLLOWING PROBLEM:

F(X) = 2X-1 + f(X-1) if X NOT EQUAL TO ZERO if f(X=0)=0

9. f(5) VALUE

a) 15 b) 24 c) 22 d) NONE

10.f(f(2))

11.f(16) - f(15)

12.f(16)+f(15)-480

13.f(f(x))=81 THEN VALUE OF X=

14.f(X)=4f(X-1) THEN VALUE OF X=

15.f(X) = f(X-1) + f(X-2) FOR X>1 THEN X=

16.f(X)-f(X-1)=f(X-8) FOR X>5 THEN X= SECTION -III:

In the follwing questins we r giving 'aword' which may not have any meaning. Find different possible words or palandrams for the word as per

que.

- I. for the following find no of distinct words that can be formed.
- 17. TYGHHTT
- A).420 B)1540 C)840 D)NONE
- 18. TYGHHTY
- 19. TYGHHTT
- 20. TYGHHTT
- 21. TYGHASD

```
22. TYGHHTY
II Find NO OF POSSIBLE PALANDRAMS for following
23. TYGHHTY
24. TYHHHTYH.
/*dEAR FRIENDS DON, T CONFUSE WITH THE WORDS REPEATED. Iam sure. Words ar
same. They might have changed the questions for 20, 21, 22. Concentrate on
that
respect*/
25 to 32 are figures. Uhave to analyse them. He will give five figs. One
is not
correct
SECTION IV:
        It having complete of figs. (26 - 32)
SECTION -V:
For following first find out the anagram and then note the
corresponding
meaning.
33. TABLET (anagram means first u arrange the letters in correct order
like
         (TABLET === BATTLE . so ans is FIGHT i.e. B)
34.RUGGED
35.GORE.
36.STASSI.
For all above choices are.
A) resentment B)Fight c)Help d) Monster
37. ENFOLD
38. LAMB
39. RECEDE.
40. PLEASE.
For above 4 choices are same
A) cuddle B) sleeping c) proclamination d) ointment.
                               60 qs; 90 min. (4 sections)
HCL SYSTEM SOFTWARE PAPER:
*******
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 poitnt 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..... 25 MHz 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

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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
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) \}
                                     ans fn(5) ....?
 return;
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;
                  ans k=4
printf("%d", k);
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
9. if x is even, then
(x%2) = 0
x &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
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```
DOUBLE CLINKED
      {
        INT DET;
                                    LIST VOID
        STRUCT PREVIOUS;
                                    BE GIVEN AND A PROCEDURE TO DELET
Ε
        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
(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

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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
 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
```

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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) 0.15

-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

VIJAYA from each section Iam 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

- 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

```
20
5) c
6) a
                120
7) b
               synchronise the access
8) a
               system call
               the operating system
9) b
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. \geq 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
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=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

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following are not in order:
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- 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(100000000+100000000)/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 not (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 |
| (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 |
| over |
| DEGE OF THEIR |

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.