

COGNIZENT PAPER

1. A says " the horse is not black".

B says " the horse is either brown or grey."

C says " the hoese is brown"

At least one is telling truth and atleast one is lying. tell the colour of horse?

Answer : grey

2. A son and father goes for boating in river upstream . After rowing for 1 mile son notices the hat of his fathe falling in the river.After 5 min. he tells his father that his hat has fallen. So they turn round and are able to pick the hat at the point from where they began boating after 5min.

Tell the speed of river?

Ans...6 miles/hr

3. $A+B+C+D=D+E+F+G=G+H+I=17$ where each letter represent a number from 1 to 9. Find out what does letter D and G represent if letter $A=4$. (8 marks)

Ans. $D=5$ $G=1$

4. Argentina had football team of 22 player of which captain is from Brazilian team and goalki from European team. For remainig palayer they have picked 6 from argentinan and 14 from european. Now for a team of 11 they must have goalki and captain so out of 9 now they plan to select 3 from rgentinian and 6 from European. Find out no. of methods available for it. (2 marks)

Ans : 160600 (check out for right no. $6C3 * 14C6$)

5. Three thives were caught stealing sheep, mule and camel.

A says " B had stolen sheep "

C says " B had stolen mule"

B says he had stolen nothing.

The one who had stolen horse is speaking truth. the one who had stolen camel is lying . Tell who had stolen what? (5 marks)

Ans. A- camel ; B- mule ; C- horse

6. A group of friends goes for dinner and gets bill of Rs 2400 . Two of them says that they have forgotten their purse so remaining make an extra contribution of Rs 100 to pay up the bill. Tell the no. of person in that group. (3 marks)

Ans - 8 person

7. In acolony there are some families. Each of them have children but different in numbers.Following are conditions:

A) No of adult no of sons no of daughters no of families.

B) Each sister must have atleast one brother and should have at the most 1 sister.

C) No of children in one family exceeds the sum of no of children in the rest families.

Tell the no of families.(5 marks)

Ans : 3 families

8. There are 6 people W,H,M,C,G,F who are murderer , victim , judge , police, witness, hangman. There was no eye witness only circumtancial witness. The murderer was sentenced to death.

Read following statement and determine who is who.

1. M knew both murderer and victim.
2. Judge asked C to describe murder incident.
3. W was last to see F alive.
4. Police found G at the murder site.
- 5 H and W never met.

(8 marks)

The above mentioned questions are of 37 marks rest I don't remember as they had no condition. One which mentions about hindustani music Gazals ect. is to be solved through venn diagram. Its of 8 marks. and another was grading 5 student which was of 5 marks.

*******COGNIZENT*******

1. In a triangle ABC $AB=AC$ then all the following are correct except one. Find that.

- a) $AB < AC + BC$ b) $AC < AB + BC$ c) $BC < AB + AC$ d) $AB + BC > AC + BC$**

2. Ten years ago the father's age is seven times the son's age. Two years later father's age is twice the son's. Then the find the ages.

3. The father's age is 3 times the son's. After 15 years its age becomes twice the son's. Find the son's age now.

4. Two times which are started from stations A and B which are separated by 110 km. One train leaves station A at 7 am. and travels 20 kmph. The other train leaves station B at 8 am. will speed of 25 kmph. Then at what time will they meet if they are travelling in opposite direction.

- a) 7 am. b) 10 am. c) 12 noon. d) 11 am.**

5) $x+2y=2$, $2x-y=4$ then

i) $x=2$ ii) $x=0$ $y=0$ iii) $x-y=2$

- a) i only b) ii only c) none d) i and () only**

6) In a family E is the father of two sons and a daughter who is

unmarried. Daughter in-law is an officer whose brother_in_law A is Engineer. C is doctor. The sister of B is Violinist who learnt Violin from B's wife. Then

6) What is the relationship between A&B. (ans. brothers)

7) Who is the wife of B (ans. officer)

8) What is the relation between E&B. (ans. father and son)

9) In a word COINCIDENCE the 1st letter is interchanged with 3rd letter and 2nd letter with 4th and so on. So what is the seventh letter from the right after interchanging.

ans is D.

10) Minimize $123658/234586=$ (ans is 0.52)

11) A and B can do a work in 6 days. B alone can do in 16 days. After 3 days B withdraws. Then how many days can be needed by A to do the work alone.

12) Two men and Three boys can do a work in 6 days. 3 men and 5 boys can do that work in 4 days. Then 8 men and 8 boys can do in how many days.

13)

123 means LITTLE BRIGHT BOY and 435 means GIRL IS BRIGHT and 267

means LITTLE THING ILLEGAL . Then LITTLE is represented by_____.

ans is 2.

14 to 17 (R.S Agarwal suggested)

On same relation like HELMET-HEAD then

HIDE _ ? (BOUND ans.)

18 to 22

Assertion and reason following (R.S Agarwal suggested)

23 to 25

Having the opposite meaning of relation given (ENGLISH)

25 TO 30

Statements

30 to 35 ---> Figuring NON VERBAL

**36 TO 38 ----> A simillarity between two figures is given.
You have to find the same simillar figure from the choice.**

39 to 41 ----> Correction of sentences.

42. How many times a minute & hours hands will meet together in a day. ans. 22 times.

**43. In a total of 36 vehicles after one car there is one scooter.
After 2nd car there will be two scooters and after 3ed car there
will be 3 scooters so on . then find the number of scooters in
the right half of arrangement. ans. 13 check.**

44. All Hoopes are Dupes

All fears are liars so

i) All hoopes are fears ii) All dupes are liars

45. & 46. like above.

**47). Find the statement which gives correct explanartion to
the contradictory statements.**

i). doctor told that "Drug adicts can not have their habit

**ii). some surveys indicate that all the drug addicts left their
drug habit.**

a) . Doctor do not know about drug addicts.

b). servays does not include every drug addict

c). Drug addiction is a bad habit.

d). will power make people leave their habbit.

48 to 54.

- - a - b b a - b - c like this.

[simple Qns from R.s.agarwal]

55. A shop keeper selling a product for 10% discount to the market

price . but by bourgaining he got 10% profit of the costprice.
Market price is 300Rs. Find the cost price.

56. Customer needs 30% discount . But shopkeeper give 20% and 10% succesively. Then

- a). Whether customer got less profit than what he needed.
- b).will he got more.
- c). no loss
- d). none

57. Cost price of two articles is 800. If he sells one article at $\frac{3}{4}$ th of cost price and another article at $\frac{4}{3}$ rd of cost price
Then he will loss 12 Rs. Then SP of article is.

- a). 600,400 b). 500, 400 c). 500,500 d). none

58 What is the longest four digit numbr which when divided by 12,17,35

leaving same remainder 5

- a) 8825 b)8725 c) 8025 d) none

59) If travels 300 meters in first two hours and next 200 mts in 3 hours and 150 meters in 2.5 hours. Find the avg speed.

- a) 56 b) 58 c)50 d) 60

ans) 60

1)

Diameter of circle is d , Find length of string.(outer string that covers the circle)

Ans: $d(\pi + 3)$

2) Diamond's value is proportional to its weight². When the diamond broke wts of pieces in ratio 1:2:3:4:5.

Total loss in value is 85,000. What is the value of the diamond twice the wt of the original diamond.

Ans : 45,000

3) Person X join a job at 20 yrs. First 3 years sal = 10,000 p.a. Afterwards every year inc of 2,000 per year for 10 year. Then sal become const till retirement. at retirement avg sal is 25,000. (thro'out career) what age he retires.?

4) In an island there are tribals who speak lang of atmost 4 words. Lang consists of 4 alphabets. How many words can be formed in that language?
Ans 340

5) It was found that the cause for the malaria was the swamp marsh and so the swamps were drained. Mosquito the real cause for malaria due to lack of breeding grounds (Swamps) also was wiped out. What does this illustrate?

(Ans : (Possible) when many conditions form a result eradication of one cause also eradicates the result)

6) An officer kept files on his table at various times in the order 1,2,3,4,5,6. Typist can take file from top whenever she has time and type it. What order she can't type.?

(Ans : 4,5,6,2,3,1)

7) A and B are fighting. B fires 3 times as many missiles as A. Total hits: total misses = 1/7. B's misses 357. B's hits - A's hits = 66. A's hits?

8) 40 shots taken. 50p for a hit. 10p for a miss. (he have to give). Finally he has Rs.5. How many hits.? Ans 15

9) Find avg of a, b, c, d, e . Given data : avg of any 4 num = avg of any 3 num
 $2(a+b)^2 = 36$

Which of the abv are sufficient?

10) What is the difference in times btwn clk 1 & clk2.

1) both show same time 6 hrs back 2) 1 clk gains 1 min an hr, clk2 gains 2 min an hour.
Like abv....

11) A takes 9 strides to B's 7 strides. A stride = 1 meter. B stride = 1.2m
B gets the start of 24m. What dist should A travel to overtake B?

12) Tortoise gets 100 m head start. Hare is 10 times faster as tort.
What is the dist traveled by hare to catch up tort.?

13) 4 weights r weighed in pairs. Weights of pairs are determined as
103, 105, 106, 106, 107, 109 What is the min wt?
Ans 51

14) Constant cost = 300
and 1.75 / copy. How many copies should he sell at 7.75 /copy to
make a profit.

15)

Find the perimeter ? ANS 28

16) 20 members avg = 10.5. 3 memb of 11.5, 12.5, 13.5 left and 3 memb of
10.5, 12.5, 14.5 joined along with a teacher of 21 yr. Now avg = Ans 11.

17)

Find the area of shaded. Radius of circle = 1cm.... Arcs r drawn with
center at circumference.

18)

Find the area of the shaded portion?

19) Solid cube of $6 * 6 * 6$. This cube is cut into 216 small
cubes. ($1 * 1 * 1$). The big cube is painted in all its faces. Then how
many of
cubes are painted at least 2 sides. (Ans 56)

20) A Bacteria is doubling at every 4 min. After 40 min 1024 bact.
Then
256 when>....? Ans : 32 min

21) A bag contains 3 balls of 11 different colors each. Find the min
no
of chances to find at least 3 balls of same color?

Ans : 23

22) If $x^2 < 4$ then $100/x$ is....? Ans : $100/x > 50$ & $100/x < -50$.

23) If $[x]$ is the int less than x and $|x|$ is the abs val of x . Then
max
of $[x]/|x|$ is Ans d) none

24) A work in 12 days b in 15 days. Find the no of days if they work
on
alternate days. Ans $13\frac{1}{4}$

25) A, B, C r positive int. Out of them 2 r odd. Then $5^2a + (b-5)^3$
 $(c-3)^2 = ?$ Ans : always odd.

26) A squarer side is 5cm. If a square of side 10cm is hinged @ the
center of the prev square. when they r rotated common area to both
squares
(Ans : Does not change)

27) $3p^2 + pq + 5q^2$ is even. If

- a) If p is odd, q is odd
- b) If p is even, q is odd
- c) If p is odd, p is even
- d) Atleast one of p and q is odd.

Choices are given. Ans : 4) None of these

28) A lady has to feed a dog for the one week from Monday to Sunday
. She has food types M, N, O, P, Q, R, S .

MNOP à protein enriched RS -à vitamin enriched. Vitamin enriched cannot
be fed on consecutive days.

Conditions given : M should be fed before S.

M should be fed before Q.

R Should be fed before S.

Before N and Q there should be four types.

Based on this 3 ?s are asked. All r easy to answer...

29) A man bought at the cost of 5 plums a rupee and 2 oranges a
rupee. He sells 10 plums and 6 oranges at the selling price of 4 plums a
rupee

and 3 oranges a rupee. What is his gain or loss? Ans loss of 50p.

30) Out of 32 books the cost of 10 books is Rs. 50 each and he got a
profit of 4%. He sells 15 books at a profit of 3.8461% on the selling
price of Rs 70. The remaining cost is 576. The remaining books are
sold

at Rs 74. What is his total profit.

31) Two solutions have milk & water in the ratio 7:5 and 6:11. Find
the

proportion in which these two solutions should

Be mixed so that the resulting solution has 1 part milk and 2 parts
water?

a) 35:3 b) 21:36 c) not possible

Ans : c

Further qs are from reading comprehension. (verbal reasoning) All are
easy to answer if u read carefully.

We are not able to get the remaining questions.

All the best -

CEGians.

[This message contained attachments]

Message: 4

Date: Wed, 18 Jun 2003 11:10:06 -0700 (PDT)

From: Vijay Ramachandran <futuristicmaverick@yahoo.com>

Subject: Hot property... CTS TCS Papers of Anna Univ GCT and PSG...

Hi to all my lovely net friends,

This is Vijay from Anna University, Chennai. CTS, TCS, HCL and Juno Online have visited here. CTS hired 67, TCS 79, HCL 44, Juno 5.

CTS

Criteria 60% and above with no standing arrears.

CTS is coming back on a second phase for EEE and Mech on 20 and 21 of this month.

Am attaching the papers of CTS which was given in GCT, Coimbatore., Anna University, Chennai and PSG, Coimbatore.

TCS

Criteria 65% and above with no standing arrears.

Am also sending the rough idea of the TCS paper (which is quite incomplete). Hope it helps u in ur preparation.

HCL

Criteria 65% and above with no standing arrears.

HCL papers were repeated as usual. U can choose from 2 options Software and Hardware. Most of us here opted for System Software which has four sections: General Computer Awareness, C programming, Analysing Program segments (Debugging), and Aptitude (which included puzzles of GRE Analytical type).

If u want HCL papers do mail me...

Juno Online

Criteria 80% and above

Juno Online test consisted of 3 sections

- 1) Aptitude
- 2) C programming
- 3) Problem Solving (Algorithm using Data structures)

Aptitude consisted of 20 questions on probability, age, analytical geometry (eqn and slope of a line etc), Trigonometry (Sec Tan etc.), and similar stuff...

This section was quite easy....

C programming had 20 questions with Find the output, what is the error, recursive functions and stuff like that...

Problem Solving had only one question:

U have 2 sets of input files. The first set is a list of 3 lettered English words eg. CAT. This vocabulary list is not in alphabetical order.

Then u have another input file which has 3 lettered words in a scrambled form. For eg. ATC is a scrambled form of CAT.

What u have to do is take each word from the second scrambled file...unscramble it and see if it matches any word in the first file of words. If

it does u have to put it into a third new file...and this file must be in alphabetical order....hope u understand...

U have to write an algorithm using data structures for this...

Don't forget to download the attachments guys....

CTS 98

IIT MADRAS

#####

analogies

1. slur : speech

ans: smulge : writing (choice is B)

7. cpahlet : shoulder

ans: ring : finger (choice is C)

8. vernanlar : place

ans: finger print : identical (choice is B)

opposite

9.corphlent

ans: emaciated (choice is D)

10. officious

ans: pragmate (choice is D)

11. dextrous

ans: clumsy (choice is B)

12 -14: each sentense is broke to four sections a,b,c,d.choose which has mistake mark (e) if you find no mistake.

12:a)phylchologists pointout that b)there are human processes

c)which does not involve d) the use of words

(choice is A)

13:a)jack ordered for b)two plates of chicken c)and a glass d)of water

(choice is A)

14:a) politics is b) (choice is A)

(are)

16 - 20: each question of group of questions is based on a passage or a set

of conditions for each question,select the best answer choice given.

(i).if it is fobidden by law if the object of agreement is the doing of an act,

that is forbidden by law the agreement is void.

(ii). if it is of the nature that, it would defeat the provision of any law is the agreement is void. if the object of agreement is such that thing got directly forbidden by law it would defeat the provision of statutory law.

(iii). if the object of agreement is fraudulent it is void.

(iv). an object of agreement is void if it involves or implies to the personal property of another.

(v). an object of agreement is void where the contract regards as ignored.

(vi). an object of agreement is void where the contract regards as opposed to public policy.

17. A, B, C enter an agreement for the division among them of gains acquired

or by be acquired by them by them by the agreement is void as

ans: ---- (choice is D)

21-25) An algorithm follows a six step process za, zb, zc, zd, ze, zf, it is governed by following

(i) zd should follow ze

(ii) the first may be za, zd or zf

(iii) zb and zc have to be performed after zd

(iv) zc must be immediately after zb

21) ans:- D

22) if za the first set zd must be

a) 3rd b) 5th c) 2nd d) 4th ans:- A or D (probably a)

23) zf can be 3rd or 5th-----any of the six, first, second or fourth only, any of first four only

none these

ans:- B

24) if zb must follow za then a) za can only 3rd or fourth

b) first or second c) can not be third d) fourth or fifth e) none

ans:- A

25) ze is third term the no of diff operations possible is

ans:- D (dabad)

26-31) ravi plans six sep-- x,y,z,w,u,v in rows no 1 to 6 ,according to the follwing conditions

he must plant x before y and u

he must plant y " w

the 3rd has to be z

26) which could be in order

a) xuywzv b) xvzyuw c)zuyxwv d)zvxuwy e) wyzuvx

ans:- B

27) which is true

a) z before v b) z before x c) w before u d) y before u

e) x before w

ans:- D

28) if he plans v first which is second

x,y,z,w,u

so ans is 'x'.

choice is A.

29) which is true

a) x,3 b)y,6 c)z,1 d)w,2 e)u,6

ans:- E

30) if he plans b 6th which would be first and second

a) x and w b) x and y c)y and x d)w and z e) w and u

ans:- B

31) if he plans w before u and after v he should plan w at

a) first b)second c)fourth d)fifth e)sixth

ans:- D

32)thursday

33)a&d

34)south hit

35)

36)at a certain moment a watch showes 2 min lag although it is fast.if it

showed a 3 min lag at that moment ,but gain 1/2 min more a day than it does.

it would show the true time one day sooner than it usually does .how many

mins does the watch gain per day.

a).2 b).5 c).6 d).4 e).75

ans : e

--->(discount problem) 20%->15%then->32% (ans:32%)

37)in 400m race a gives b a start of 7 sec & beats by 24m.in another race

a beats by 10 sec.the speeds are

a)8,7 b)7,6 c)10,8 d)6,8 e)12,10

ans:c(10,8)

38) $3x+4y=10$

$x^3+y^3=6$ minimum value of $3x+11y=?$

ans=?

39)0.75

40)-

41)sink---7.7kms--->

fills $2\frac{1}{4}$ t is 5.5 min. 92 tonnes enough.. sink throws out 18 tonnes/hr. avg. speed to

a)1.86 b)8.57 c)9.4 d)11.3 e)10.7

42)

.	_____	
/ \ 2	2 cms	
/ _a_ \	_____	
/ \ 3	2 cms	area of the d=50 cm square
/ _b_ \	_____	what is the area of the b=?
/ \ 4	2 cms	
/ _c_ \	_____	
/ \ 5	2 cms	ans=(10.7)
/ _d_ \	_____	

43)600 tennis players

4% ->wrist band on one wrist

of remain 96%->25%->on both hands

remain no of ---(ans:312)

44)312(doubt) or 432

45)in how many ways 5e,6s,3f be arranged if books of each language are to be

kept together

17,64800,90,58400,3110400

ans:e(3!*5!*6!*3!=3110400)

46)---

47)three types of the a,b,c costs Rs. 95/kg,100/kg&70/kg .how many kg of

each be blended to produce 100 kg of mixture worth Rs.90/kg,gives that

the quantities of b&c are equal

a)70,15,15 b)50,25,25 c)60,20,20 d)40,30,30

ans:b

48)water milk problem

49)x+y+z=w

q)two distinct no's are taken from 1,2,3,4.....28

a)probably that the no is 6 -->1/14

b)probably that it exceeds 14 -->1/28

c)both exceed 5 is 3/28

d)less than 13->25/28 (24/28)

e)none

ans:d

51)1200 died 6

due to acc 7

55)170%

56)c

Folder: Inbox Message 9 of 52 (OLD)

Junk Mail Sent Trash

Date: Tue, 25 Jul 00 17:20PM MDT
From: Rohit Kumar Singh <rohitsingh80@yahoo.com>
To: karthikenm@usa.net
Subject: Forward this mail to Basu (Papers for Campus)

--

cognizent

>> >

**t his hat has fallen. So they
turn around**

>> and are

>

>> able

**>> >to pick the hat at the point from where they began
boating**

>> after 5

>

>> min.

>> >Tell the speed of river.

>> >

>> >Ans...6 miles/hr

>> >

>> >

**>> >3 A+B+C+D=D+E+F+G=G+H+I=17 where each letter
represent a**


```

>> number from
>
>> 1 to
>> >9. Find out what does letter D and G represent if
letter A=4.
>>
>
>> (8
>> >marks)
>> >
>> >ans. D=5
>> > G=1
>> >
>> >4. Argentina had football team of 22 player of
which captain is
>> from
>
>> >Brazilian team and goalki from European team. For
remainig
>> palayer
>
>> they
>> >have picked 6 from argentinan and 14 from
european. Now for a
>> team of
>
>> 11
>> >they must have goalki and captain so out of 9 now
they plan to
>> select
>
>> 3
>> >from argentinian and 6 from European. Find out no.
of methods
>> avilable
>
>> for
>> >it (2 marks)
>> >
>> >Ans : 160600( check out for right no.  $6C3 * 14C6$ )

```

>> >

>> >

>> >5 Three thieves were caught stealing sheep, mule and camel.

>> > A says " B had stolen sheep "

>> > C says " B had stolen mule"

>> > B says he had stolen nothing.

>> > the one who had stolen horse is speaking truth.
the one who

>> had

>

>> stolen

>> >camel is lying . Tell who had stolen what? (5 marks)

>> >

>> >ans. A- camel

>> > B- mule

>> > C- horse

>> >

>> >6 a group of friends goes for dinner and gets bill of Rs 2400

>> . Two

>

>> of

>> >them says that they have forgotten their purse so remaining

>> make an

>

>> extra

>> >contribution of Rs 100 to pay up the bill. Tell the no. of

>> person in

>

>> that

>> >group. (3 marks)

>> >

>> >

>> >Ans - 8 person

>> >

>> >

>> >7. In a colony there are some families. Each of them have
 >> children but
 >
 >> >different in numbers. Following are conditions
 >> > a> no of adult>no of sons>no of daughters>no of families.
 >> > b>each sister must have atleast one brother and should have
 >> at the
 >
 >> most
 >> >1 sister.
 >> > c> no of children in one family exceeds the sum of no of
 >> children
 >
 >> in the
 >> >rest families.
 >> >
 >> > Tell the no of families.(5 marks)
 >> >
 >> >
 >> >ans : 3 families
 >> >
 >> >8. There are 6 people W,H,M,C,G,F who are murderer , victim ,
 >> judge ,
 >
 >> >police, witness, hangman. There was no eye witness only
 >> circumtancial
 >
 >> >witness. The murderer was sentenced to death.
 >> >Read following statement and determine who is who.
 >> >
 >> >1. M knew both murderer and victim.
 >> >2. Judge asked C to discribe murder incident.
 >> >3. W was last to see F alive.
 >> >4. Police found G at the murder site.

>> >5 H and W never met.
>> >
>> >(8 marks)
>> >
>> >
>> >
>> >The above mentioned questions are of 37 marks rest
I don't
>> remember
>
>> >as they had no of condition. One which mentions
about
>> hundustani music
>
>> ,
>> >Gazals ect. is tobe solved through venn diagram.
Its of 8
>> marks. and
>
>> >another was grading 5 student which was of 5
marks.

S
> =====
>
>
> // This is another paper, we don't have this paper
as such, I am
>giving

> // over all idea of paper with some question...
 >
 > // There r 5 sections; 5 questions in section1, 5
 in section 2
 > // 8 marks in english (section 3); section 4 TRue
 or False type
 >
 > /*****
 > Section1:
 >
 > 5 questions.. (Mutiple choices)
 >
 > i.e select any one of the following for 5
 questions;;
 >
 > A) only 1 is sufficient
 > B) only 2 is sufficient
 > C) both nessary
 > D) both are insufficient
 > E) either is sufficient
 >
 >
 > 1. (Don't know)
 >
 > 2. one composition contains... $\frac{5}{4}$ L $\frac{6}{14}$ L....
 >
 > (Ans. both r insufficient)
 >
 > 3. x fabric.... 6.50 per meter , 25% wholesale...
 >
 > (Ans: both r required)
 >
 > 4 & 5 don't know....
 >
 > /*****/
 >
 > Section 2 (Analitical...)
 >
 > 1. Average 3years 45,000, 1st 1.5 times, 2nd 2.5
 times..

>

> (Calculate in this way... $(x+1.5x+2.5x)/3 = 45000$ i.e $5x/3 = 45000$)

> then calculate required value...)

>

> 2. Three vehicle speed ratio 1:2:3 & time ratio 3:2:1...

> Distance ratio ??

>

> (Ans: 3:4:3.. check once)

>

> 3. some km/hr problem...

>

> (Ans: 150 km/hr)

>

> 4 & 5 don't know....

>

>/*****/

>

> Section 3 (English - 8 marks.. mutiple choice..)

>

> Don't know...

>

>/*****/

>

> Section 4 (True or Flase type..)

>

> 1. Square contains all angles , one object does not contain angles;

>

> 1.1 True

> 1.2 False

> 1.3 True

>

```

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0
Transitional//EN">
<!-- saved from
url=(0055)http://vvasan.hypermart.net/paper/hughes/hughes99_5.txt
-->
<HTML><HEAD>
<META content="text/html; charset=windows-1252"
http-equiv=Content-Type>
<META content="MSHTML 5.00.2014.210"
name=GENERATOR></HEAD>
<BODY><XMP>There were two papers one was aptitude ( 36
questions) and other was
technical(20 questions)

```

**1: given an expression tree and asked us to write the
in fix of that expression**

four choices

**2:
global variables in different files are**

**a:at compiletime
b) loading time
c) linking time
d)execution time**

**3)size of(int)
a) always 2 bytes
b) depends on compiler that is being used
c) always 32 bits
d) can't tell**

4)which one will over flow given two programs

2

prog 1: prog2:

```

main() main()
{ {

```

```

int fact; int
fact=0
long int x;
for(i=1;i<=n;i++)
fact=factorial(x);
fact=fact*i;

} }

```

```

int factorial(long int x)
{

if(x>1) return(x*factorial(x-1);
}

```

- a) program 1;
- b) program 2;
- c) both 1 &2
- d) none

}

5) variables of fuction call are allocated in

- a) registers and stack
- b) registers and heap
- c) stack and heap
- d)

6)

avg and worst case time of sorted binary tree

7) data structure used for proority queue

- a) linked list b) double linkedd list c)array d)
- tree

8)


```
main(){
char str[5]="hello";
if(str==NULL) printf("string null");
else printf("string not null");
}
```

what is out put of the program?

a) string is null b) string is not null c) error in program d) it executes but prints nothing

9) there are one 5 pipe line and another 12 pipe line states are there and flushed time taken to execute five instructions

a) 10,17
b) 9,16
c) 25,144
d)

10)

for hashing which is best on terms of buckets

a) 100 b) 50 c) 21 d) 32 ans 32

11)

```
void f(int value){
for (i=0;i<16;i++){
if(value &0x8000>>1) printf("1")
else printf("0");
}
}
```

what is printed?

a) binary value of argument b) bcd value c) hex value d) octal value

12)

```
void f(int *p){
static val=100;
val=&p;
}
main(){
int a=10;
printf("%d ",a);
f(&a);
printf("%d ",a);
}
what will be out put?
a)10,10
```

13)

```
struct a{
int x;
float y;
char c[10];
}
union b{
int x;
float y;
char c[10];
}
which is true?
a) size of(a)!=sizeof(b);
b)
c)
d)
```

14)

```
# define f(a,b) a+b
#defiune g(c,d) c*d
```

find value of $f(4, g(5, 6))$

a) 26 b) 51 c) d)

15)

find avg access time of cache

a) $tc * h + (1 - h) * tm$ b) $tcH + tmH$

c) d) tc is time to access cache tm is time to access when miss occurs

16)

main()

```
{  
char a[10]="hello";  
strcpy(a, '\0');  
printf("%s", a);  
}
```

output of the program?

a) string is null b) string is not null c) program error d)

17)

simplify k map

1 x x 0

1 x 0 1

18)

int f(int a)

```
{  
a = +b;
```

//some stuff

```
}
```

```
main()
```

```
{
```

```
x=fn(a);
```

```
y=&fn;
```

what are x & y types

a) x is int y is pointer to a function which takes integer value

19) char a[5][15];

int b[5][15];

address of a 0x1000 and b is 0x2000 find address of a[3][4] and b[3][4]

assume char is 8 bits and int is 32 bits

a) b) c) d)

there are 20 questions all in technical paper and 36 questions in aptitude test

in aptitude they have given all diagrams and asked to find what comes next

they are quite easy and i hope if u practice regularly u can do it easily

for technical they have given 1 hr for 20 questions and for non technical they have given only 40 min and 36 questions

this is the paper i have right now

1. main()

```
{
```

```
fork();
```

```
fork();
```

```
fork();
printf("\n hello");
}
```

How many times print command is executed?

```
2.main()
{
int i,*j;
i=5;
j=&i;
printf("\ni= %d",i);
f(j);

printf("\n i= %d",i);
}
```

```
void f(int*j)
{
int k=10;
j= &k;
}
```

output is
a 5 10
b 10 5
c 5 5
d none

3.
some question on pipeline like you have to findout
the total time
by which execution is completed for a pipeline of 5
stages.

4.

```
main()
{
int *s = "\0";
```

```
if(strcmp(s,NULL)== 0)
printf("\n s is null")p
else
printf("\n s is not null");
}
```

5.

some syntax which returns a pointer to function

6. size of integer is

a. 2 bytes

b 4 bytes

c. machine dependant

d compiler dependent.

7.max and avg. height of sorted binary tree

a. logn n

b n logn

8.

some question. like the number was shifted everytime by one and bitwise and with 10000000.

one was supposed to find what the code was doing.

I feel the answer was most probably finding decimal value.

9. int a[5][4]

int is 2 bytes base address for array is 4000(Hexa)

what will be addr for a[3][4]?

int is 4 bytes same question.

10.

implementation of priority queue

a. tree

b linked list

c doubly linked list.

</XMP></BODY></HTML>

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CTS '99
Pondicherry

SECTION I - 8 questions.
Series.

1. Interchange of letters in a word and the adjacent letters are also 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 5 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

Ans: B A A B B A

//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 $n=1$

$$f(n \ a \ b \ c) = f(n-1 \ a \ b \ c) + f(1 \ a \ b \ c) + f(n-1 \ b \ a \ c) \\ \text{if } n > 1$$

$$f(2) = ?$$

Ans: $f(2 \ a \ c \ b) = ab + ac + bc.$

2. similar question in functions.

3. [based on function in 1.] $f(4 \ a \ b \ c)$ the number of terms is...?

$$\text{Ans: } f(4 \ a \ b \ c) = f(3 \ a \ c \ b) + f(1 \ a \ b \ c) + f(3 \ b \ a \ c) \text{ etc.} \\ = 5ab + 5ac + 5bc.$$

4. $f(5 \ a \ b \ c) = ?$

SECTION III

Permutations and Combinations.

8 questions.

1. r = number of flags;

n = number of poles;

Any number of flags can be accommodated on any single pole.

i) $r=5, n=5$ 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 consisting 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 of 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.....

Eg. 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)

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 $X \neq 0$
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 differnet 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 are

same.They might have changed the questionsfor20,21,22.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)proclamation d)ointment.

1. Numbers between 1 to 100 divisible by 2 or 3.
2. Sum of the numbers from 1 to 100 if the digit 6 is replaced by 9 in those numbers(Ans : 330)
3. You have an one Kg weight with you. In how many weighs can a 31 Kg rice bag be weighed?
(Ans : 5)
4. Priya bought 6 pens, 7 notebooks, and 8 pencils and she had spent all the money she had for that. Rama bought 13 pens, 12 notebooks and 9 pencils and rama had 50% of money more than what priya had. How much % rama spends more than priya on priya?
5. This is an analytical question
There are four numbers a,b,c and d.
Conditions : $a+b+c+d=100$.
 $A,b,c,d \geq 10$
All are even numbers
Each number is different from the other.
What is the maximum possible value for a? (four choices given)
6. If $a=54$ then what is the difference between the biggest(54) and the second biggest number?
7. if $a=54$; $c=2+2d$ then $c=?$
8. What is the Selling price of x? if the profit % =5% and the cost price = 100
9. Similar question to the above one.
10. Calculate the ages of a son and his father if their present ages are in the ratio 1:2 and before 10 years the ratio was 3:4
11. Same type as the previous one. Sum of their present ages is 80, before 5 years their ages were in the ratio 3:4.(some more questions were from this category)
12. Two cars start from terminals A and B and travel towards B and A respectively. The distance between A and B is 500 metres. The cars move forward with a speed of 50 m/s and they move backwards with a speed of 25 m/s. For every 100 cms movement of the cars in the forward direction they should move backwards by 50 cms. What is the time taken for the cars to collide or meet?
13. In a pack of 52 cards if Ass, Jack, queen and king is removed (from all the four sets) , what is the sum of the remaining cards?
14. An Analytical question from Barron's, having the keywords such as 18th century, 19th century and 20th century in the question
15. The diameter of the circle is 4cm. The area of the shaded portion is $\frac{1}{3}$ rd area of the square.

Find the side of the square

Four girls participate in a the Ms.India competition. Each were wearing a saree of different colour. They were made to sit in a row.

The winner was wearing a yellow saree.

The runner up was not in the corners.

Ms.AP was next to Ms.West Bengal.

Ms.west Bengal is neither the winner nor the runner.

Ms.Maharastra was wearing a green saree.

Ms.UP was the runner up.

Both winner and the runner are not adjacent and have a person between them.

Who was wearing a Red saree? Ms.WB

Who was the winner? Ms.AP

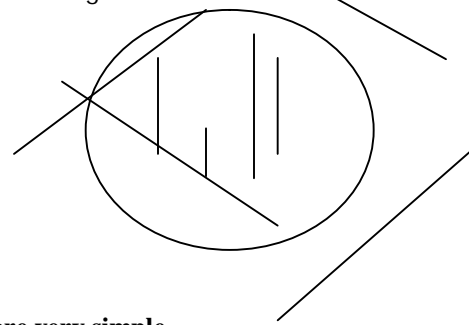
And one more question of the same order. Plz frame the order. All analyticals are very simple.

Mostly paragraphs are given and the question will be what do you infer from this type. Only one question from each paragraph.

XX) What is the number that divides (3 nos), leaving the remainders(3 nos) . sums of this type are in RS.A plz refer.

16.In 400m race a gives b a start of 7 sec & beats by 24m.in another race a beats by 10 sec. the speeds are

- a)8,7 b)7,6 c) 12,10 d) 10,8



17. A is thrice as good as a workman as B and takes 10 days less to do a piece of work than B takes. B alone can do the same work in :

- a) 12 days b)15 c)20 d)30

ans available in Agarwal: pp 261 (13)

18. Again from Agarwal:

the mean temperature of Monday to Wednesday was 37 deg. The mean temperature of Tuesday to Thursday was 34 deg. If the temperature on Thursday was $\frac{4}{5}$ of Monday, what is the temperature on Thursday?

Ans:36. pp=104 (47) in RS. Agarwal

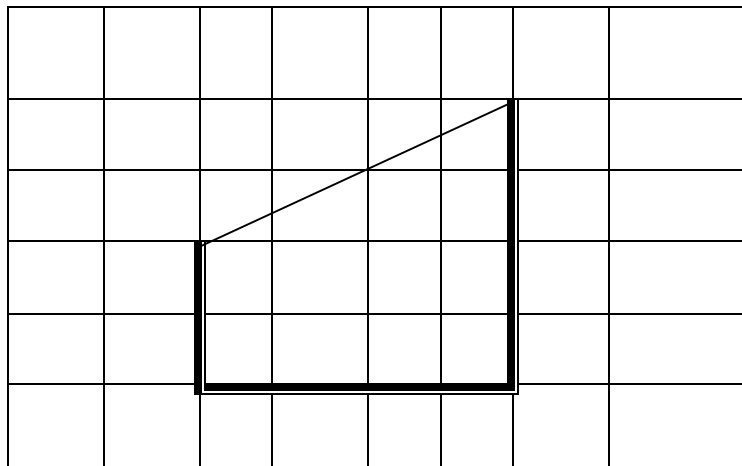
19 A travels at 4 kmph. Two hours after the start of A, B travels at a speed of 1 kmph for the first one hour, 2 kmph for the next one hour and so on. At what time will they meet.

Ans: 9 hours and 48 mts.

20. Given 80 coins with one defective. What is the minmum number of weighings that you will take to detemine the defective (less weight) coin.

Minimum of 5 is available in the question paper. Six is also possible.

21.

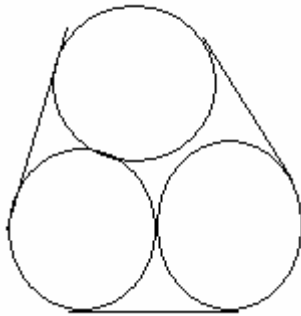


What is the number of squares under the figure? ans: 16

CTS 2003 – nit jsr
Aptitude test: **60Qs Time 1 hr**

Booklet color : Blue

1)



Diameter of circle is d , Find length of string.(outer string that covers the circle)

Ans: $d(\pi + 3)$

2) Diamond's value is proportional to its weight². When the diamond broke wts of pieces in ratio 1:2:3:4:5.

Total loss in value is 85,000. What is the value of the diamond twice the wt of the original diamond.

Ans : 45,000

3) Person X join a job at 20 yrs. First 3 years sal = 10,000 p.a. Afterwards every year inc of 2,000 per year for 10 year. Then sal become const till retirement. at retirement avg sal is 25,000. (thro'out career) what age he retires.?

4) In an island there are tribals who speak lang of atmost 4 words. Lang consists of 4 alphabets. How many words can be formed in that language? Ans 340

5) It was found that the cause for the malaria was the swamp marsh and so r swamps were drained .Mosquito the real cause for malaria due to lack of breeding grounds (Swamps) also was wiped out. What does this illustrate?

(Ans : (Possible) when many conditions form a result eradication of one cause also eradicates the result)

6)An officer kept files on his table at various times in the order 1,2,3,4,5,6 .Typist can take file from top whenever she has time and type it.What order she cann't type.?

(Ans : 4,5,6,2,3,1)

7)A and B r fighting .B fires 3 times as many missiles as A. Total hits: total misses = $1/7$.B's misses 357.B's hits – A's hits = 66.A's hits?

8)40 shots taken.50p for a hit.10p for a miss.(he have to give).Finally he has Rs.5.How many hits.? Ans 15

9)Find avg of a,b,c,d,e .Given data : avg of any 4 num =avg of any 3 num $2)(a+b)^2 = 36$

Which of the abv are sufficient?

10)What is the difference in times btwn clk 1 & clk2.

1) both show same time 6 hrs back 2) 1 clk gains 1 min an hr,clk2 gains 2 min an hour.
Like abv....

11)A takes 9 strides to B's 7 strides. A stride = 1meter.B stride =1.2m B gets the start of 24m.What dist should A travel to overtake B?

12) Tortoise gets 100 m head start. Hare is 10 times faster as tort. What is the dist traveled by hare to catch up tort.?

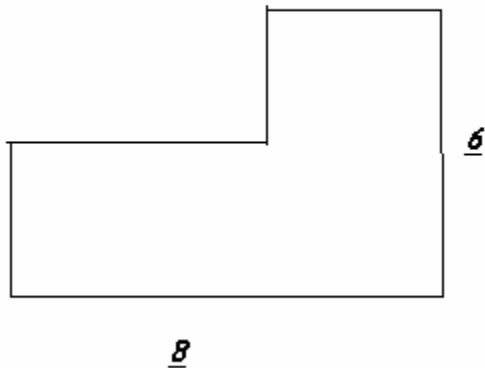
13)4 weights r weighed in pairs. Weights of pairs are determined as 103,105,106,106,107,109 What is the min wt?

Ans 51

14) Constant cost = 300

and 1.75 / copy. How many copies should he sell at 7.75 /copy to make a profit.

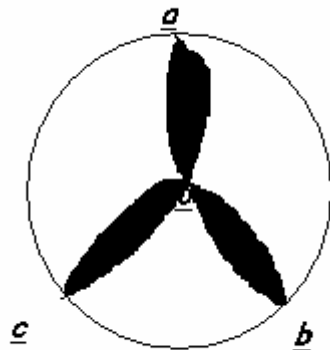
15)



Find the perimeter ? ANs 28

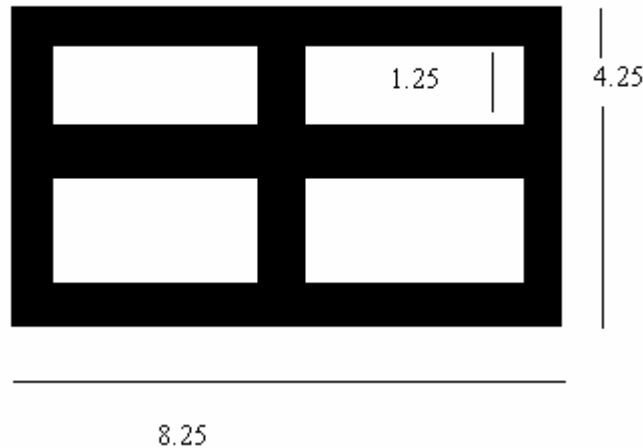
16) 20 members avg =10.5. 3 memb of 11.5,12.5,13.5 left and 3 memb of 10.5,12.5,14.5 joined along with a teacher of 21 yr.Now avg =Ans 11.

17)



Find the area of shaded. Radius of circle = 1cm.....Arcs r drawn with center at circumference.

18)



Find the area of the shaded portion?

19) Solid cube of $6 * 6 * 6$. This cube is cut into to 216 small cubes.($1 * 1 * 1$).the big cube is painted in all its faces. Then how many of cubes are painted at least 2 sides. (Ans 56)

20) A Bacteria is doubling at every 4 min. After 40 min 1024 bact. Then 256 when>.....? Ans : 32 min

21) A bag contains 3 balls of 11 different colors each. Find the min no of chances to find at least 3 balls of same color?

Ans : 23

22) If $x^2 < 4$ then $100/x$ is....? Ans : $100/x > 50$ & $100/x < -50$.

23) If $[x]$ is the int less than x and $|x|$ is the abs val of x .Then max of $[x]/|x|$ is Ans d)none

24) A work in 12 days b in 15 days. Find the no of days if they work on alternate days. Ans $13 \frac{1}{4}$

25) A,B,C r positive int.Out of them 2 r odd. Then $5^{2a} + (b-5)^3 (c-3)^2 = ?$ Ans : always odd.

26) A square side is 5cm. If a square of side 10cm is hinged @ the center of the prev square. when they are rotated common area to both squares (Ans : Does not change)

27) $3p^2 + pq + 5q^2$ is even. If

- a) If p is odd, q is odd
- b) If p is even, q is odd
- c) If p is odd, p is even
- d) Atleast one of p and q is odd.

Choices are given. Ans : 4) None of these

28) A lady has to feed a dog for the one week from Monday to Sunday. She has food types M,N,O,P,Q,R,S.

MNOP → protein enriched RS → vitamin enriched. Vitamin enriched cannot be fed on consecutive days.

Conditions given : M should be fed before S.

M should be fed before Q.

R Should be fed before S.

Before N and Q there should be four types.

Based on this 3 ?s are asked. All are easy to answer...

29) A man bought at the cost of 5 plums a rupee and 2 oranges a rupee. He sells 10 plums and 6 oranges at the selling price of 4 plums a rupee and 3 oranges a rupee. What is his gain or loss?
Ans loss of 50p.

30) Out of 32 books the cost of 10 books is Rs. 50 each and he got a profit of 4%. He sells 15 books at a profit of 3.8461% on the selling price of Rs 70. The remaining cost is 576. The remaining books are sold at Rs 74. What is his total profit.

31) Two solutions have milk & water in the ratio 7:5 and 6:11. Find the proportion in which these two solutions should be mixed so that the resulting solution has 1 part milk and 2 parts water?

a) 35:3 b) 21:36 c) not possible Ans : c

Further qs are from reading comprehension.(verbal reasoning) All are easy to answer if u read carefully.

We are not able to get the remaining questions.

All the best nitians

CTS Apti Question paper (Colour: Yellow)

There are other three colours also. We received only yellow Question papers.

- 1. If all the 6 are replaced by 9, then the algebraic sum of all the numbers from 1 to 100(both inclusive) varies by**

Ans: 330

- 2. The total no. of numbers that are divisible by 2 or 3 between 100 and 200(both inclusive) are**

Ans:67

- 3. From a pack of cards Jack, Queen, King & ace are removed. Then the algebraic sum of rest of the cards is**

Ans:216

- 4. The average temperature of days from Monday to Wednesday is 37 degree Celsius and that of from Tuesday to Thursday is 34 degrees. The temperature of Thursday is $\frac{4}{5}$ th of Monday. Then the temperature of Thursday is**

Ans:

36 degrees

- 5. Swetha, Tina, Uma and Vidya are playing a gambling. In this different people lose in different games-in the reverse alphabetical order. The rule is that if one loses she should double the amount of others. At the end of 4th game each of them have same amount of money (Rs.32). Which one of them started with the least amount? (6) Which one of them started with the largest amount of money? (7.) At the end of the 2nd game what is the amount of money with uma?**

Ans: Vidya,

Swetha, Rs.8

8. A cube of 12 mm is painted on all its side. If it is made up of small cubes of size 3mm. If the big cube is splitted into those small cubes, the number of cubes that remain unpainted is

Ans: 8

9. B is 50% faster than A. If A starts at 9 A.M. and B starts at 10 A.M. A travels at a speed of 50 km/hr. If A and B are 300 kms apart, The time when they meet when they travel in opposite direction is

Ans:12 noon

10. A graph will be there. Inside the graph sheet there will be a Quadrilateral. We have to count the number of squares in the Quadrilateral.

11. You are having 31kg of rice. You are provided with a 1kg stone for weighing. In how many weights the 31kg of rice can be weighed. *Ans: 5*

12. A starts at 11:00AM and travels at a speed of 4km/hr. B starts at 1:00PM and travels at 1km/hr for the first 1hr and 2km/hr for the next hr and so on. At what time they will meet each other.

Ans:

13. There are 80 coins, among them one coin weighs less compared to other. You are given a physical balance to weigh. In how many wieghings the odd coin can be found.

Ans:

14. Dia of the circle 4cm. The shaded part is $\frac{1}{3}$ of the square area. What is the side of the square.

Ans: root of 3pi

15. A,B,C, can do a work in 8,14,16 days respectively. A does the work for 2 days. B continues from it and finishes till 25% of the remaining work. C finishes the remaining work. How many days would have taken to complete the work

Ans:

16. Raja went to a beauty contest .his wife was eager to know the result he told that the lady wear a yellow sari was winner. Miss. Andhra Pradesh Miss. Utter Pradesh, Miss. Maharashtra, Miss. West Bengal were the participants all the participants sat in a row. The conditions are (A) The woman wore yellow sari won the competition. (B) Miss. West Bengal was neither the runner-up or winner.(C) Miss. West Bengal was not at either ends.(D) Miss. Maharastra wore the white sari.(E) The women wore white sari and yellow sari sat at extreme ends.(F) The runner-up and winner did not sit together. [This was the passage given and the questions were easy]
17. The ratio of white balls and black balls is 1:2. If 9 gray balls is added it becomes 2:4:3. Then what is number of black balls.
Ans:12
18. There are 10 coins. 6 coins showing head. And 4 showing tail. Each coin was randomly flipped (not tossed) seven times successively.after flipping the coins are 5 heads 4 tails one is hided the hided coin will have what.
19. Two cars are 500 cm apart. each is moving forward for 100 cm at a velocity of 50 cm/s and receding back for 50 cm at 25 cm/s at what time they will collide with each other.
20. People near the sea shore are leading a healthy life as they eat fish.but people at other part of the city are also healthy.
Inference.
21. It is found from research that if u r a drunken then u have a less chance for chronic heart diseases. Inference.
22. $A-B+c>A+B-C$ i) B is +ve, ii) B is -ve when it will hold true.
23. i) C.P is Rs 120 and profit is 30%
ii) C.P is Rs 210 and profit is 20%
we can find the S.P by using
i)only ii)only both i & ii neither i&ii

24. How will u find distance between Nagpur and Mumbai?

I took one hour more when I travel at 80 km/hr than at 90 km/hr.

25. 100 coins were collected by four persons each collected more than 10 each collected a different number each was an even number find what is the max possible no of coins, two more questions based on the same passage.

26. A car travels from B at a speed of 20 km/hr. The bus travel starts from A at a time of 6 A.M. There is a bus for every half an hour interval. The car starts at 12 noon. Each bus travels at a speed of 25 km/hr. Distance between A and B is 100 km. During its journey , The number of buses that the car encounter is

- 27. The ratio of the ages of the father and the son is 5:3, After 10 years it will be in the ratio 3:2. What will be their ages.**
- 28. There was a Island. In that Island there was Rubys and Emeralds. Those were available in plenty. 0.3 kg of ruby is 4 lakhs and 0.4 kg of emeralds is 5 lakhs. Jayanth is buying 12 kg of Ruby and emerald. Choices will be given . Jayanth has to carry both ruby and emerald to the maximum profit.**
- 29. Varun buys 8 books,10 pens and 2 pencils and Babu buys 6 books, 5pens and 5 pencils. Babu pays 50% more than Varun. What is the amount Varun spends in buying pencils.**
- 30. Prakash and Revathi rent a fancy shop. Prakash imposes the following restrictions on Revathi for buying clips,stickers and lip sticks. The number of clips is twice the no. of stickers. The no. of lipsticks should be more than the sum of clips and stickers. Cost of clip is 1 rupee. Cost of lipstick is twice the clips. Cost of 1 lipstick is the cost of four stickers. Then What is the amount that Prakash spends for Revathi. Answer choices will be given.**

1.Train A starts from station A at 11.am.Train B starts from station B at 12 noon.the speed of train A is 4 kmph,train B is 1 kmph for the first hour,2 kmph for the 2nd hour,3 kmph for the 3rd hour etc.At what time do the two trains meet? ans:2 PM

2.There is a coin collection.100 coins in all.4 peopke collect coins.Each collects a minimum of 10 coins.and each has different number of coins.the numbers are even. (4 questions based on this)

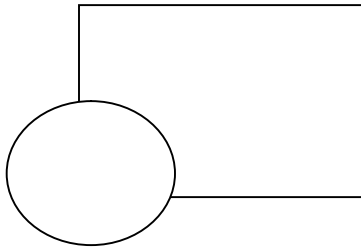
3.Moped problem based on time and distance

4.Find the number of integers divisible by either 3 and 12 from 1 to 999.

5.Find the number of integers divisible by either 3 or 2 from 100 to 200 including both,

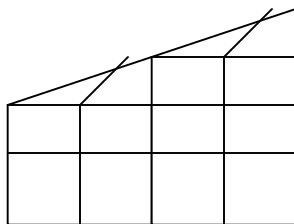
6. There is a cube of side 4 cm. The faces are coloured in red. The cube is cut into pieces of size 1 cm. How many cubes have no colour Ans: 8
7. There are 80 coins. One coin is counterfeit in weight. How many minimum weighings are required to find out the counterfeit coin? Ans: 4
8. There are 31 kgs of rice. With a 1 kg weight, Find out the minimum number of weighings required to weigh 31 kgs.
9. There are four contestants in a beauty contest. They are Ms. UP, Ms. MP, Ms. AP and Ms. WB. Each is wearing a different colour saree (red, blue, green and white). They are seated in a row. The winner and runner are not sitting near each other. Ms. WB is neither the winner nor the runner. The green and white saree contestants are sitting in either end and the green color saree contestant is the runner up.
- 4 questions based on this
10. There is a pack of cards. Find the sum of integers excluding all the picture cards.
Ans: 216
11. Two questions based on figure. Given at the end.
12. There are 2 cars moving in opposite directions. The distance between them is 300 cm. They move forward for 100 cm with a speed of 50 cm/s, and come back 50 cm at 25 cm/s. After how many seconds will the cars collide?
13. There is a room with 12 slots for painting. The details about the paintings are as follows:
- 18th century paintings - 3
 - 19th century paintings - 2
 - 20th century paintings - 4
- Make up a sequence so that the paintings may be arranged with the following rules.
- 1) The 5th slot is always empty.
 - 2) There must be an empty slot between paintings of different groups (century).
 - 3) The paintings of the same group can be placed together.
- A set of questions were asked with the pattern that was framed.

14)



Find the area of the square which is covered by the circle.
The area is $\frac{1}{3}$ area of the square. Find the side of the square.

15)



Find the number of squares.

CTS 98
IIT MADRAS

analogies

1. slur : speech

ans: smulge : writing (choice is B)

7. cpahlet : shoulder

ans: ring : finger (choice is C)

8. vernanlar : place

ans: finger print : identical (choice is B)

opposite

9. corphlent

ans: emaciated (choice is D)

10. officious

ans: pragmate (choice is D)

11. dextrous

ans: clumsy (choice is B)

12 -14: each sentence is broke to four sections a,b,c,d. choose which has mistake mark (e) if you find no mistake.

12: a) phylchologists pointout that

b) there are human processes

c) which does not involve d) the use of words (choice is A)

13: a) jack ordered for

b) two plates of chicken

c) and a glass d) of water (choice is A)

14: a) politics is

b) (choice is

A) (are)

16 - 20: each question of group of questions is based on a passage or a set of conditions for each question, select the best answer choice given.

(i). if it is forbidden by law if the object of agreement is the doing of an act, that is forbidden by law the agreement is void.

(ii). if it is of the nature that, it would defeat the provision of any law if the agreement is void. if the object of agreement is such that thing got directly forbidden by law it would defeat the provision of statutory law.

(iii). if the object of agreement is fraudulent it is void.

(iv). an object of agreement is void if it involves or implies to the personal property of another.

(v). an object of agreement is void where the constant regards as ignored.

(vi). an object of agreement is void where the constant regards is as opposed to public policy.

17. A, B, C enter an agreement for the division of many things of gains acquired or by be acquired by them by them by the argument is void as:

ans: ---- (choice is D)

21-25) An algorithm follows a six step process za,zb,zc,zd,ze,zf, it is governed by following:

- (i) zd should follow ze
- (ii) the first may be za,zd or zf
- (iii) zb and zc have to be performed after zd
- (iv) zc must be immediately after zb

21) ans: - D22) if za the first set zd must be

- a) 3rd
- b) 5th
- c) 2nd
- d) 4th ans: - A or D (probably a)

23) zf can be 3rd or 5th-----any of the six, first, second or forth only,any of first four only none these:

ans: - B

24) if zb must follow za then

- a) za can only 3rd or fourth
- b) first or second
- c) can not be third
- d) fourth or fifth
- e) none

ans: - A

25) ze is third term the no of diff operations possible is

ans: - D (dabad)

26-31) ravi plans six sep-- x,y,z,w,u,v in rows no 1 to 6 ,according to the following conditions he must plant x before y and u he must plant y " w the 3rd has to be z

26) which could be in order

- a) xuywzv
- b) xvzyuw
- c) zuyxwv
- d) zvxuwy
- e) wyzuvx

ans: - B

27) which is true

- a) z before v
- b) z before x
- c) w before u
- d) y before u
- e) x before w

ans: - D

28) if he plans v first which is second x,y,z,w,u so ans is 'x'.
choice is A.

29) which is true

- a) x,3

b)y,6
c)z,1
d)w,2
e)u,6
ans: - E

30) if he plans b 6th which would be first and second
a) x and w
b) x and y
c)y and x
d)w and z
e) w and u
ans: - B

31) if he plans w before u and after v he should plan w at
a) first
b)second
c)fourth
d)fifth
e)sixth
ans: - D

32)thursday

33)a&d

34)south hit

35)

36)at a certain moment a watch shows 2 min lag although it is fast.if it showed a 3 min lag at that moment ,but gain $\frac{1}{2}$ min more a day than it does. it would show the true time one day sooner than it usually does .how many mins does the watch gain per day.
a).2
b).5
c).6
d).4
e).75
ans : e

----> (discount problem) 20%->15%then->32% (ans:32%)

37)in 400m race a gives b a start of 7 sec & beats by 24m.in another race a beats by 10 sec.the speeds are
a)8,7
b)7,6
c)10,8
d)6,8
e)12,10
ans:c(10,8)

38) $3x+4y=10$
 $x^3+y^3=6$ minimum value of $3x+11y=?$
ans=?

39) 0.75

40)-

41) sink --- 7.7 kms --- > fills $2\frac{1}{4}$ t in 5.5 min. 92 tonnes enough.. sink throws out 18 tonnes/hr. avg. speed to

a) 1.86

b) 8.57

c) 9.4

d) 11.3

e) 10.7

42) . _____

/ \ 2 2 cms

/ _ a _ \ _____

/ \ 3 2 cms area of the d=50 cm square

/ _ b _ \ _____ what is the area of the b=?

/ \ 4 2 cms

/ _ c _ \ _____

/ \ 5 2 cms ans=(10.7)

/ _ d _ \ _____

43) 600 tennis players 4% > wrist band on one wrist of remain 96% > 25% > on both hands

remain no of --- (ans: 312)

44) 312 (doubt) or 432

45) in how many ways 5e, 6s, 3f be arranged if books of each language are to be kept together

17,64800,90,58400,3110400

ans: $e(3! \cdot 5! \cdot 6! \cdot 3!) = 3110400$

46)---

47) three types of the a, b, c costs Rs. 95/kg, 100/kg & 70/kg . how many kg of each be blended to produce 100 kg of mixture worth Rs. 90/kg, gives that the quantities of b & c are equal

a) 70, 15, 15

b) 50, 25, 25

c) 60, 20, 20

d) 40, 30, 30

ans: b

48) water milk problem

49) $x + y + z = w$

q) two distinct no's are taken from 1, 2, 3, 4, 28

a) probably that the no is 6 -- > $1/14$

b) probably that it exceeds 14 -- > $1/28$

c) both exceed 5 is $3/28$

d) less than 13 -- > $25/28$ ($24/28$)

e) none

ans: d

51) 1200 died 6
due to acc 7

55) 170%

CTS '99

Pondicherry

SECTION I - 8 questions.

Series.

1. Interchange of letters in a word and the adjacent letters are also to be changed. given letters series like [also few conditions]

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 5 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

Ans: B A A B B A

//Hint: As per question papers 5 questions above like but numbers change.

REMAINING 3 QUESTIONS:

6. To get AAABBD from BBAAAA what to apply: -

a) 25 b) 34 c) 25 & 34 d) none

SECTION II

1. Given the function $f(n \text{ a b c}) = ac$ if $n=1$

$f(n \text{ a b c}) = f(n-1 \text{ a b c}) + f(1 \text{ a b c}) + f(n-1 \text{ b a c})$

if $n > 1$

$f(2) = ?$

Ans: $f(2 \text{ a c b}) = ab + ac + bc.$

2. similar question in functions.

3. [based on function in 1.] $f(4 \text{ a b c})$ the number of terms is...?

Ans: $f(4 \text{ a b c}) = f(3 \text{ a c b}) + f(1 \text{ a b c}) + f(3 \text{ b a c})$ etc.

$= 5ab + 5ac + 5bc.$

4. $f(5 \text{ a b c}) = ?$

SECTION III

Permutations and Combinations.

8 questions.

1. r = number of flags;

n = number of poles;

Any number of flags can be accommodated on any single pole.

i) $r=5, n=5$ 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 consisting 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 of 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.....

Eg. 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)

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 following questions we are giving 'a word' which may not have any meaning. Find different possible words or palindromes 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 PALINDROMES for following

23. TYGHHTY

24. TYHHHTYH.

/*DEAR FRIENDS DON'T CONFUSE WITH THE WORDS REPEATED. I am sure. Words are same. They might have changed the questions for 20, 21, 22. Concentrate on that respect*/

25 to 32 are figures. You have 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 you 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) proclamation d) ointment.

Folder: Inbox Message 9 of 52 (OLD)

Junk Mail Sent Trash

Date: Tue, 25 Jul 00 17:20PM MDT
From: Rohit Kumar Singh <rohitsingh80@yahoo.com>
To: karthikenm@usa.net
Subject: Forward this mail to Basu (Papers for Campus)

--

cognizent

>> >

>> >PAPER

>> >

>> >1. A says " the horse is not black".

>> > B says " the horse is either brown or grey."

>> > c says " the hoese is brown"

>> > At least one is telling truth and atleast one
is lying. tell

>> the

>

>> colour

>> >of horse.

>> >

>> >

>> >Answer : grey

>> >

>> >

>> >2. A son and father goes for boating in river
upstream . After

>> rowing
 >
 >> for 1
 >> >mile son notices the hat of his fathe falling in
 the river.
 >> After 5
 >
 >> min. he
 >> >tells his father that his hat has fallen. So they
 turn around
 >> and are
 >
 >> able
 >> >to pick the hat at the point from where they began
 boating
 >> after 5
 >
 >> min.
 >> >Tell the speed of river.
 >> >
 >> >Ans...6 miles/hr
 >> >
 >> >
 >> >3 $A+B+C+D=D+E+F+G=G+H+I=17$ where each letter
 represent a
 >> number from
 >
 >> 1 to
 >> >9. Find out what does letter D and G represent if
 letter A=4.
 >>
 >
 >> (8
 >> >marks)
 >> >
 >> >ans. D=5
 >> > G=1
 >> >
 >> >4. Argentina had football team of 22 player of
 which captain is

>> from
 >
 >> >Brazilian team and goalki from European team. For remainig
 >> palayer
 >
 >> they
 >> >have picked 6 from argentinan and 14 from european. Now for a
 >> team of
 >
 >> 11
 >> >they must have goalki and captain so out of 9 now they plan to
 >> select
 >
 >> 3
 >> >from argentinian and 6 from European. Find out no. of methods
 >> avilable
 >
 >> for
 >> >it (2 marks)
 >> >
 >> >Ans : 160600(check out for right no. $6C3 * 14C6$)
 >> >
 >> >
 >> >5 Three thives were caught stealing sheep, mule and camel.
 >> > A says " B had stolen sheep "
 >> > C says " B had stolen mule"
 >> > B says he had stolen nothing.
 >> > the one who had stolen horse is speaking truth.
 the one who
 >> had
 >
 >> stolen
 >> >camel is lying . Tell who had stolen what? (5 marks)
 >> >

>> >ans. A- camel

>> > B- mule

>> > C- horse

>> >

>> >6 a group of friends goes for dinner and gets
bill of Rs 2400

>> . Two

>

>> of

>> >them says that they have forgotten their purse so
remaining

>> make an

>

>> extra

>> >contribution of Rs 100 to pay up the bill. Tell
the no. of

>> person in

>

>> that

>> >group. (3 marks)

>> >

>> >

>> >Ans - 8 person

>> >

>> >

>> >7. In a colony there are some families. Each of
them have

>> children but

>

>> >different in numbers. Following are conditions

>> > a> no of adult>no of sons>no of daughters>no of
families.

>> > b>each sister must have atleast one brother and
should have

>> at the

>

>> most

>> >1 sister.

>> > c> no of children in one family exceeds the sum
of no of

>> children

>

>> in the

>> >rest families.

>> >

>> > Tell the no of families.(5 marks)

>> >

>> >

>> >ans : 3 families

>> >

>> >8. There are 6 people W,H,M,C,G,F who are murderer
, victim ,

>> judge ,

>

>> >police, witness, hangman. There was no eye witness
only

>> circumtancial

>

>> >witness. The murderer was sentenced to death.

>> >Read following statement and determine who is who.

>> >

>> >1. M knew both murderer and victim.

>> >2. Judge asked C to discribe murder incident.

>> >3. W was last to see F alive.

>> >4. Police found G at the murder site.

>> >5 H and W never met.

>> >

>> >(8 marks)

>> >

>> >

>> >

>> >The above mentioned questions are of 37 marks rest
I don't

>> remember

>

>> >as they had no of condition. One which mentions
about

>> hundustani music

>

>> ,

>> >Gazals ect. is tobe solved through venn diagram.
Its of 8
>> marks. and
>
>> >another was grading 5 student which was of 5
marks.

S
> =====
>
>
> // This is another paper, we don't have this paper
as such, I am
>giving
> // over all idea of paper with some question...
>
> // There r 5 sections; 5 questions in section1, 5
in section 2
> // 8 marks in english (section 3); section 4 TRue
or False type
>
>/*****
> Section1:
>
> 5 questions.. (Mutiple choices)
>
> i.e select any one of the following for 5
questions;;
>

- > A) only 1 is sufficient
- > B) only 2 is sufficient
- > C) both necessary
- > D) both are insufficient
- > E) either is sufficient

>

>

- > 1. (Don't know)

>

- > 2. one composition contains... $\frac{5}{4}$ L $\frac{6}{14}$ L....

>

- > (Ans. both are insufficient)

>

- > 3. x fabric.... 6.50 per meter , 25% wholesale...

>

- > (Ans: both are required)

>

- > 4 & 5 don't know....

>

>/*****/

>

- >Section 2 (Analytical...)

>

- > 1. Average 3 years 45,000, 1st 1.5 times, 2nd 2.5 times..

>

- > (Calculate in this way... $(x+1.5x+2.5x)/3 = 45000$ i.e $5x/3 =$

>45000)

- > then calculate required value...)

>

- > 2. Three vehicle speed ratio 1:2:3 & time ratio 3:2:1...

- > Distance ratio ??

>

- > (Ans: 3:4:3.. check once)

>

- > 3. some km/hr problem...

>

- > (Ans: 150 km/hr)

>
 > 4 & 5 don't know....
 >
 >/*****/
 >
 > Section 3 (English - 8 marks.. mutiple choice..)
 >
 > Don't know...
 >
 >/*****/
 >
 > Section 4 (True or Flase type..)
 >
 > 1. Square contains all angles , one object does
 not contain angles;
 >
 > 1.1 True
 > 1.2 False
 > 1.3 True
 >

```

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0
Transitional//EN">
<!-- saved from
url=(0055)http://vvasan.hypermart.net/paper/hughes/hughes99_5.txt
-->
<HTML><HEAD>
<META content="text/html; charset=windows-1252"
http-equiv=Content-Type>
<META content="MSHTML 5.00.2014.210"
name=GENERATOR></HEAD>
<BODY><XMP>There were two papers one was aptitude ( 36
questions) and other was
technical(20 questions)
  
```

1: given an expression tree and asked us to write the

in fix of that expression

four choices

2:

global variables in different files are

a:at compiletime

b) loading time

c) linking time

d)execution time

3)size of(int)

a) always 2 bytes

b) depends on compiler that is being used

c) always 32 bits

d) can't tell

4)which one will over flow given two programs

2

prog 1: prog2:

main() main()

{ {

int fact; int

fact=0

long int x;

for(i=1;i<=n;i++)

fact=factorial(x);

fact=fact*i;

} }

int factorial(long int x)

{

if(x>1) return(x*factorial(x-1);

}

- a) program 1;
- b) program 2;
- c) both 1 & 2
- d) none

}

5) variables of function call are allocated in

- a) registers and stack
- b) registers and heap
- c) stack and heap
- d)

6)

avg and worst case time of sorted binary tree

7) data structure used for priority queue

- a) linked list b) double linked list c) array d) tree

8)

```
main(){
char str[5]="hello";
if(str==NULL) printf("string null");
else printf("string not null");
}
```

what is output of the program?

- a) string is null b) string is not null c) error in program d) it executes but prints nothing

9) there are one 5 pipe line and another 12 pipe line
states are there and flushed
time taken to execute five instructions

- a) 10,17
- b) 9,16
- c) 25,144
- d)

10)

for hashing which is best on terms of buckets

- a) 100 b) 50 c) 21 d) 32 ans 32

11)

```
void f(int value){  
for (i=0;i<16;i++){  
if(value &0x8000>>1) printf("1")  
else printf("0");  
}  
}
```

what is printed?

- a) binary value of argument
- b) bcd value
- c) hex value
- d) octal value

12)

```
void f(int *p){  
static val=100;  
val=&p;  
}  
main(){  
int a=10;  
printf("%d ",a);  
f(&a);  
printf("%d ",a);  
}
```

what will be out put?

- a) 10,10

13)

```
struct a{
int x;
float y;
char c[10];
}
```

```
union b{
int x;
float y;
char c[10];
}
```

which is true?

a) $\text{size of}(a) \neq \text{sizeof}(b)$;

b)

c)

d)

14)

```
# define f(a,b) a+b
```

```
#define g(c,d) c*d
```

find value of $f(4, g(5, 6))$

a) 26 b) 51 c) d)

15)

find avg access time of cache

a) $t_c * h + (1-h) * t_m$ b) $t_c H + t_m H$

c) d) t_c is time to access cache t_m is time to access when miss occurs

16)

```
main()
```

```
{
```

```
char a[10]="hello";  
strcpy(a,'\0');  
printf("%s",a);  
}
```

out put of the program?

a) string is null b) string is not null c) program error d)

17)

simplyfy k map

1 x x 0

1 x 0 1

18)

```
int f(int a)
```

```
{
```

```
a=+b;
```

```
//some stuff
```

```
}
```

```
main()
```

```
{
```

```
x=fn(a);
```

```
y=&fn;
```

what are x & y types

a) x is int y is pointer to afunction which takes integer value

19) char a[5][15];

int b[5][15];

address of a 0x1000 and b is 0x2000 find address of a[3][4] and b[3][4]

assume char is 8 bits and int is 32 bits

a) b) c) d)

there are 20 questions all in technical paper and 36 questions in aptitude test

in aptitude they have given all diagrams and asked to find what comes next

they are quite easy and i hope if u practice regularly u can do it easily

for technical they have given 1 hr for 20 questions and for non technical they have given only 40 min and 36 questions

this is the paper i have right now

```
1. main()
{
fork();
fork();
fork();
printf("\n hello");
}
```

How many times print command is executed?

```
2. main()
{
int i,*j;
i=5;
j=&i;
printf("\ni= %d",i);
f(j);

printf("\n i= %d",i);
```

```
}
```

```
void f(int*j)
{
int k=10;
j= &k;
}
```

output is

a 5 10

b 10 5

c 5 5

d none

3.

**some question on pipeline like you have to findout
the total time**

**by which execution is completed for a pipeline of 5
stages.**

4.

```
main()
{
int *s = "\0";
```

```
if(strcmp(s,NULL)== 0)
printf("\n s is null")p
else
printf("\n s is not null");
}
```

5.

some syntax which returns a pointer to function

6. size of integer is

a. 2 bytes

b 4 bytes

c. machine dependant

d compiler dependent.

7.max and avg. height of sorted binary tree

a. $\log n$

b $n \log n$

8.

**some question. like the number was shifted everytime
by one and bitwise and with 10000000.**

one was supposed to find what the code was doing.

**I feel the answer was most probably finding decimal
value.**

9. $\text{int } a[5][4]$

int is 2 bytes base address for array is 4000(Hexa)

what will be addr for $a[3][4]$?

int is 4 bytes same question.

10.

implementation of priority queue

a. tree

b linked list

c doubly linked list.

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CTS 2003 – Anna University. June 2, 2003

Admitted branched: **B.E. CSE,ECE, B.Tech ELECTRONICS ,M.C.A, B.Tech I.T.(Dual Degree)**

Appeared students: **456**

Shortlisted for interview:188

Selected students: 67

Cse:26

Ece:21

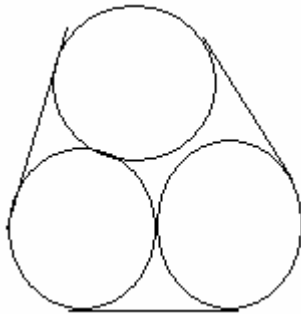
Mca:8

Electronics:12

Aptitude test: **60Qs Time 1 hr**

Booklet color : Blue

1)



Diameter of circle is d, Find length of string.(outer string that covers the circle)

Ans: $d(\pi + 3)$

2) Diamond\'s value is proportional to its weight² .When the diamond broke wts of pieces in ratio 1:2:3;4:5.

Total loss in value is 85,000.What is the value of the diamond twice the wt of the original diamond.

Ans : 45,000

3) Person X joins a job at 20 yrs. First 3 years sal = 10,000 p.a. Afterwards every year inc of 2,000 per year for 10 year. Then sal becomes const till retirement. At retirement avg sal is 25,000. (thru'out career) what age he retires.?

4) In an island there are tribals who speak lang of atmost 4 words. Lang consists of 4 alphabets. How many words can be formed in that language? Ans 340

5) It was found that the cause for the malaria was the swamp marsh and so the swamps were drained. Mosquito the real cause for malaria due to lack of breeding grounds (Swamps) also was wiped out. What does this illustrate?

(Ans : (Possible) when many conditions form a result eradication of one cause also eradicates the result)

6) An officer kept files on his table at various times in the order 1,2,3,4,5,6. Typist can take file from top whenever she has time and type it. What order she can't type.?

(Ans : 4,5,6,2,3,1)

7) A and B are fighting. B fires 3 times as many missiles as A. Total hits: total misses = 1/7. B's misses 357. B's hits - A's hits = 66. A's hits?

8) 40 shots taken. 50p for a hit. 10p for a miss. (he has to give). Finally he has Rs.5. How many hits.? Ans 15

9) Find avg of a,b,c,d,e. Given data : avg of any 4 num = avg of any 3 num $2(a+b)^2 = 36$

Which of the abv are sufficient?

10) What is the difference in times btwn clk 1 & clk2.

2) both show same time 6 hrs back 2) 1 clk gains 1 min an hr, clk2 gains 2 min an hour.
Like abv....

11) A takes 9 strides to B's 7 strides. A stride = 1 meter. B stride = 1.2m B gets the start of 24m. What dist should A travel to overtake B?

12) Tortoise gets 100 m head start. Hare is 10 times faster as tort. What is the dist traveled by hare to catch up tort.?

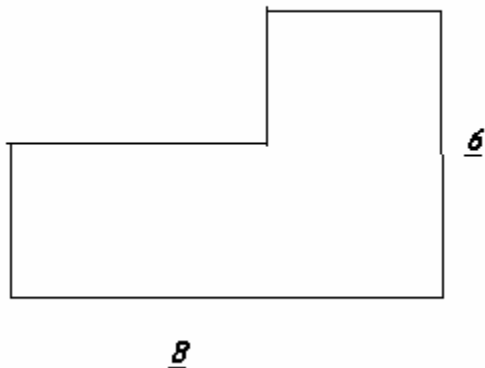
13) 4 weights are weighed in pairs. Weights of pairs are determined as 103, 105, 106, 106, 107, 109. What is the min wt?

Ans 51

14) Constant cost = 300

and 1.75 / copy. How many copies should he sell at 7.75 / copy to make a profit.

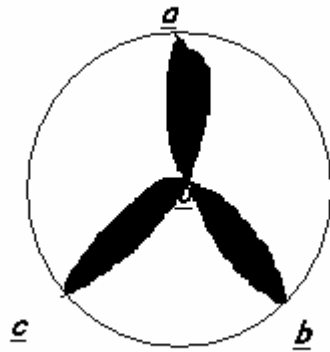
15)



Find the perimeter ? ANs 28

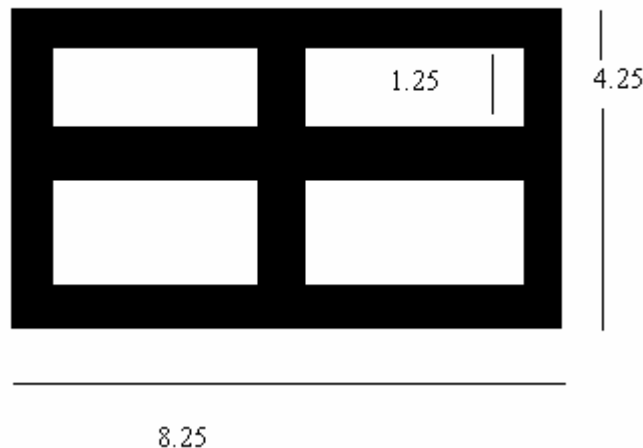
16) 20 members avg = 10.5. 3 members of 11.5, 12.5, 13.5 left and 3 members of 10.5, 12.5, 14.5 joined along with a teacher of 21 yr. Now avg = Ans 11.

17)



Find the area of shaded. Radius of circle = 1cm.....Arcs r drawn with center at circumference.

18)



Find the area of the shaded portion?

32) Solid cube of $6 * 6 * 6$. This cube is cut into to 216 small cubes.($1 * 1 * 1$).the big cube is painted in all its faces. Then how many of cubes are painted at least 2 sides. (Ans 56)

33) A Bacteria is doubling at every 4 min. After 40 min 1024 bact. Then 256 when>.....? Ans : 32 min

34) A bag contains 3 balls of 11 different colors each. Find the min no of chances to find at least 3 balls of same color?

Ans : 23

35) If $x^2 < 4$ then $100/x$ is....? Ans : $100/x > 50$ & $100/x < -50$.

36) If $[x]$ is the int less than x and $|x|$ is the abs val of x . Then max of $[x]/|x|$ is Ans d) none

37) A work in 12 days b in 15 days. Find the no of days if they work on alternate days. Ans $13 \frac{1}{4}$

38) A,B,C r positive int. Out of them 2 r odd. Then $5^{2a} + (b-5)^3 (c-3)^2 = ?$ Ans : always odd.

39) A squarer side is 5cm. If a square of side 10cm is hinged @ the center of the prev square. when they r rotated common area to both squares (Ans : Does not change)

40) $3p^2 + pq + 5q^2$ is even. If

- a) If p is odd, q is odd**
- b) If p is even, q is odd**
- c) If p is odd, p is even**
- d) Atleast one of p and q is odd.**

Choices are given. Ans : 4) None of these

41) A lady has to feed a dog for the one week from Monday to Sunday .She has food types M,N,O,P,Q,R,S .

MNOP \rightarrow protein enriched RS \rightarrow vitamin enriched. Vitamin enriched cannot be fed on consecutive days.

Conditions given : M should be fed before S.

M should be fed before Q.

R Should be fed before S.

Before N and Q there should be four types.

Based on this 3 ?s are asked. All r easy to answer...

42) A man bought at the cost of 5 plums a rupee and 2 oranges a rupee. He sells 10 plums and 6 oranges at the selling price of 4

plums a rupee and 3 oranges a rupee. What is his gain or loss?

Ans loss of 50p.

43) Out of 32 books the cost of 10 books is Rs. 50 each and he got a profit of 4%. He sells 15 books at a profit of 3.8461% on the selling price of Rs 70. The remaining cost is 576. The remaining books are sold at Rs 74. What is his total profit.

44) Two solutions have milk & water in the ratio 7:5 and 6:11. Find the proportion in which these two solutions should be mixed so that the resulting solution has 1 part milk and 2 parts water?

a)35:3 b)21:36 c)not possible Ans :c

Further qs are from reading comprehension.(verbal reasoning) All are easy to answer if u read carefully.

We are not able to get the remaining questions.

All the best -

CEGians.

CTS Apti Question paper (Colour: Yellow)

There are other three colours also. We received only yellow Question papers.

6. If all the 6 are replaced by 9, then the algebraic sum of all the numbers from 1 to 100(both inclusive) varies by

Ans: 330

7. The total no. of numbers that are divisible by 2 or 3 between 100 and 200(both inclusive) are

Ans:67

8. From a pack of cards Jack, Queen, King & ace are removed. Then the algebraic sum of rest of the cards is

Ans:216

9. The average temperature of days from Monday to Wednesday is 37 degree Celsius and that of from Tuesday to Thursday is 34 degrees. The temperature of Thursday is $\frac{4}{5}$ th of Monday. Then the temperature of Thursday is

Ans:

36 degrees

10. Swetha, Tina, Uma and Vidya are playing a gambling. In this different people lose in different games-in the reverse alphabetical order. The rule is that if one loses she should double the amount of others. At the end of 4th game each of them have same amount of money (Rs.32). Which one of them started with the least amount? (6) Which one of them started with the largest amount of money? (7.) At the end of the 2nd game what is the amount of money with uma?

Ans: Vidya,

Swetha, Rs.8

8. A cube of 12 mm is painted on all its side. If it is made up of small cubes of size 3mm. If the big cube is splitted into those small cubes, the number of cubes that remain unpainted is

Ans: 8

9. B is 50% faster than A. If A starts at 9 A.M. and B starts at 10 A.M. A travels at a speed of 50 km/hr. If A and B are 300 kms apart, The time when they meet when they travel in opposite direction is
Ans: 12 noon

24. A graph will be there. Inside the graph sheet there will be a Quadrilateral. We have to count the number of squares in the Quadrilateral.

25. You are having 31kg of rice. You are provided with a 1kg stone for weighing. In how many weights the 31kg of rice can be weighed. *Ans: 5*

26. A starts at 11:00AM and travels at a speed of 4km/hr. B starts at 1:00PM and travels at 1km/hr for the first 1hr and 2km/hr for the next hr and so on. At what time they will meet each other.
Ans:

27. There are 80 coins, among them one coin weighs less compared to other. You are given a physical balance to weigh. In how many weighings the odd coin can be found.
Ans:

28. Dia of the circle 4cm. The shaded part is $\frac{1}{3}$ of the square area. What is the side of the square.
Ans: root of 3π

29. A,B,C, can do a work in 8,14,16 days respectively. A does the work for 2 days. B continues from it and finishes till 25% of the remaining work. C finishes the remaining work. How many days would have taken to complete the work
Ans:

30. Raja went to a beauty contest .his wife was eager to know the result he told that the lady wear a yellow sari was winner. Miss. Andhra Pradesh Miss. Utter Pradesh, Miss. Maharashtra, Miss. West Bengal were the participants all the participants sat in a row. The conditions are (A) The woman wore yellow sari won the competition. (B) Miss. West Bengal was neither the runner-up or winner.(C) Miss. West Bengal was not at either ends.(D) Miss. Maharastra wore the white

sari.(E) The women wore white sari and yellow sari sat at extreme ends.(F) The runner-up and winner did not sit together. [This was the passage given and the questions were easy]

31. The ratio of white balls and black balls is 1:2. If 9 gray balls is added it becomes 2:4:3. Then what is number of black balls.

Ans:12

32. There are 10 coins. 6 coins showing head. And 4 showing tail. Each coin was randomly flipped (not tossed) seven times successively.after flipping the coins are 5 heads 4 tails one is hided the hided coin will have what.
33. Two cars are 500 cm apart. each is moving forward for 100 cm at a velocity of 50 cm/s and receding back for 50 cm at 25 cm/s at what time they will collide with each other.
34. People near the sea shore are leading a healthy life as they eat fish.but people at other part of the city are also healthy.
Inference.
35. It is found from research that if u r a drunken then u have a less chance for chronic heart diseases. Inference.
36. $A-B+C > A+B-C$ i) B is +ve, ii) B is -ve when it will hold true.
37. i) C.P is Rs 120 and profit is 30%
ii) C.P is Rs 210 and profit is 20%
we can find the S.P by using
i)only ii)only both i & ii neither i&ii

24. How will u find distance between Nagpur and Mumbai?

I took one hour more when I travel at 80 km/hr than at 90 km/hr.

25. 100 coins were collected by four persons each collected more than 10 each collected a different number each was an even number find what is the max possible no of coins, two more questions based on the same passage.

26. A car travels from B at a speed of 20 km/hr. The bus travel starts from A at a time of 6 A.M. There is a bus for every half an hour interval. The car starts at 12 noon. Each bus travels at a speed of 25 km/hr. Distance between A and B is 100 km. During its journey , The number of buses that the car encounter is

- 31. The ratio of the ages of the father and the son is 5:3, After 10 years it will be in the ratio 3:2. What will be their ages.**
- 32. There was a Island. In that Island there was Rubys and Emeralds. Those were available in plenty. 0.3 kg of ruby is 4 lakhs and 0.4 kg of emeralds is 5 lakhs. Jayanth is buying 12 kg of Ruby and emerald. Choices will be given . Jayanth has to carry both ruby and emerald to the maximum profit.**
- 33. Varun buys 8 books,10 pens and 2 pencils and Babu buys 6 books, 5pens and 5 pencils. Babu pays 50% more than Varun. What is the amount Varun spends in buying pencils.**
- 34. Prakash and Revathi rent a fancy shop. Prakash imposes the following restrictions on Revathi for buying clips,stickers and lip sticks. The number of clips is twice the no. of stickers. The no. of lipsticks should be more than the sum of clips and stickers. Cost of clip is 1 rupee. Cost of lipstick is twice the clips. Cost of 1 lipstick is the cost of four stickers. Then What is the amount that Prakash spends for Revathi. Answer choices will be given.**

heres the latest CTS paper...from GCT coimbatore.....excuse for the attachment...comp was here wasn't doing it...so diagrams are not there...i guess you'll figure it out urself....

**best of luck....
vaibhav**

CTS 2003 COIMBATORE

1)

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Ans: $d(\pi + 3)$

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Ans :c

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