## CMC Placement Paper

Analytical Reasoning
(1-5) steps problem
There are six steps that lead from the first to the second floor.
No two people can be on the same step.
Mr A is two steps below Mr C
Mr B is a step next to Mr D
Only one step is vacant ( No one standing on that step )
Denote the first step by step 1 and second step by step 2 etc.
(1) If Mr A is on the first step, Which of the following is true?
(A) Mr B is on the second step
(B) Mr C is on the fourth step.
(C) A person Mr E, could be on the third step
(D) Mr D is on heigher step than Mr C .

Ans: (D)
(2). If Mr E was on the third step \& Mr B was on a higher step than

Mr E which step must be vacant
(A) step 1 (B) step 2 (C) step 4 (D) step 5 (E) step 6

Ans: (A)
(3). If Mr B was on step 1 , which step could A be on?
(A) 2\&e only (B) $3 \& 5$ only (C) $3 \& 4$ only (D) $4 \& 5$ only (E) $2 \& 4$ only

Ans: (C)
(4). If there were two steps between the step that A was standing and the step that B was standing on, and A was on a higher step than D , A must be on step
(A) 2 (B) 3 (C) 4 (D) 5 (E) 6 Ans: (C)
(5). Which of the following is false
i. B\&D can be both on odd-numbered steps in one configuration
ii. In a particular configuration A and C must either both an odd numbered steps or both an even-numbered steps iii. A person E can be on a step next to the vacant step.
(A) i only (B) ii only (C) iii only Ans : (C)

Six swimmers A B C D E F compete in a race. There are no ties. The out comes are as follows.

1. B does not win.
2. Only two swimmers seperate E \& D
3. A is behind $\mathrm{D} \& \mathrm{E}$
4. $B$ is ahead of $E$, wiht one swimmer intervening
5. $F$ is a head of $D$
(6). who is fifth
(A) A (B) B (C) C (D) D (E) E Ans : (E)
(7) How many swimmers seperate A and F "
(A) 1 (B) 2 (C) 3 (D) 4 (E) not deteraminable from the given info.

Ans :( D )
(8). The swimmer between $\mathrm{C} \& \mathrm{E}$ is
(A) none (B) F (C) D (D) B (E) A Ans: (A)
(9). If the end of the race, swimmer D is disqualified by the Judges then swimmer B finishes in which place
(A) 1 (B) 2 (C) 3 (D) 4 (E) 5 Ans: (B).

Cimney problem (10-14)

Five houses lettered A,B,C,D, \& E are built in a row next to each other. The houses are lined up in the order A,B,C,D, \& E. Each of the five houses has a coloured chimney. The roof and chimney of each house must be painted as follows.

1. The roof must be painted either green,red ,or yellow.
2. The chimney must be painted either white, black, or red.
3. No house may have the same color chimney as the color of roof.
4. No house may use any of the same colors that the every next house uses.
5. House E has a green roof.
6. House B has a red roof and a black chimney
10). Which of the following is true ?
(A) At least two houses have black chimney.
(B) At least two houses have red roofs.
(C) At least two houses have white chimneys
(D) At least two houses have green roofs

Ans: (C)
11). Which must be false ?
(A) House A has a yellow roof
(B) House A \& C have different colour chimney
(C) House D has a black chimney
(D) House E has a white chmney
(E) House B\&D have the same color roof.

Ans: (B)
12). If house C has a yellow roof. Which must be true.
(A) House E has a white chimney
(B) House E has a balck chimney
(C) House E has a red chimney
(D) House D has a red chimney
(E) House C has a balck chimney

Ans: (A)
13). Which possible combinations of roof \& chimney can house
I. A red roof 7 a black chimney
II. A yellow roof \& a red chimney
III. A yellow roof \& a black chimney
(A) I only (B) II only (C) III only (D) I \& II only (E) I\&II\& III

Ans; (E)
14). What is the maximum total number of green roofs for houses Ans: (C)
15). There are 5 red shoes, 4 green shoes. If one drasw randomly a shoe what is the probability of getting redshoe is $5 \mathrm{c} 1 / 9 \mathrm{c} 1$
16). What is the selling price of a car? cost of car is Rs 60 \& profit 10\% profit over selling price Ans : Rs 66/-
17). $1 / 3$ of girls , $1 / 2$ of boys go to canteen. What factor and total number of clasmates go to canteen. Ans: cannot be determined. 18). price of a product is reduced by $30 \%$. What percentage should be increased to make it $100 \%$ Ans: $42.857 \%$
19) There is a square of side 6 cm . A circle is inscribed inside the square. Find the ratio of the area of circle to square.

```
r=3
circle/square = 11/14
```

20). Two candles of equal lengths and of different thickness are there. The thicker one will last of six hours. The thinner 2 hours less than the thicker one.
Ramesh light the two candles at the same time. When he went to bed he saw the thicker one is twice the length of the thinner one. For how long did Ramesh lit two candles .

Ans: 3 hours.
21). $M / N=6 / 53 M+2 N=$ ? Ans: cannot be determined
22). $\mathrm{p} / \mathrm{q}=5 / 42 \mathrm{p}+\mathrm{q}=$ ? cannot determined.
23). If PQRST is a parallelogram what it the ratio of triangle PQS \& parallelogram PQRST

Ans: 1:2
24). cost of an item is Rs 12.607 profit is $10 \%$ over selling price what is the selling price

Ans: Rs 13.86/-
25). There are 6 red shoes \& 4 green shoes . If two of red shoes are drawn what is the probability of getting red shoes

Ans: $6 \mathrm{c} 2 / 10 \mathrm{c} 2$
26). 15 lts of water containing $20 \%$ alcohol, then added 5 lts of water. What is \% alcohol.

Ans : 15\%
27). A worker pay 20/- day , he works $1,1 / 3,2 / 3,1 / 8.3 / 4$ in a week. what is the total amount paid for that worker

Ans: 57.50
28). The value of $x$ is between $0 \& 1$ which is the larger?

Ans: (D)

## DATA SUFFICIENCY

(A) (1) alone sufficient
(B) (2) alone sufficient
(C) both together are sufficient
(D) (1) alone \& (2) alone sufficient
(E) information not sufficient
1). A man of 6 feet tall is standing near a light on the top of a pole. what is the length of the shadow cost by the man.
(1) The pole is 18 feet high
(2) The man is 12 feet high Ans: (C)
2). Two pipes A and B empty into a resrvoir , pipe A can fill the reservoir in 30 minutes by itself. How long it will take for pipe A and pipe B together to fill up the reservoir.
(1) By itself, pipe B can fill up the reservoir in 20 minutes
(2) pipe B has a larger cross-sectional area than pipe A

Ans: (A)
3). K is an integer. Is K is divisible by 12
(1) K is divisible by 4
(2) K is divisible by 3 Ans: (C)
4). How far it from A to B
(1) It is 15 miles from A to C
(2) it is 25 miles from C to B Ans: (E)
5). Was Melissa Brown's novel published?
(1). If Melissa Brown's novel was published she would receive atleast \$1000 in royalities during 1978
(2). Melissa Brown's income for 1978 was over $\$ 1000$

Ans: (E)
6). Does every bird fly?
(1) Tigers do not fly.
(2) Ostriches do not fly

Ans: (B)
7). How much does John weigh? Jim weigh 200 pounds.
(1) Toms weight plus Moes weight equal to John's weight.
(2) John's weight plus Moe's weight equal to Twice Tom's weight.

Ans: (C)
8). Is the figure ABCD is a rectangle

(1). $x=90$ (degrees)
(2). $A B=C D$

Ans: (E)
9). Find $x+2 y$
(1). $x+y=10$
(2). $2 x+4 y=20$

Ans: (B).
10). Is angle BAC is a right angle $\ \backslash$
|y $\mid$
|
|x z
(1). $x=2 y$
(2) $y=1.5 z$

Ans: (E)
11). Is $x$ greater than $y$
(1) $x=2 k$
(2) k=2y Ans: (E)
12). A piece of string 6 feet long is cut into three smaller pieces. How long is the longer of ther three pieces?
(1). Two pieces are the same length.
(2) One piece is 3 feet 2 inches lone

Ans: (B)
13). How many rolls of wall paper necessary to cover the walls of a room whose floor and ceiling are rectangles 12 feet wide and 15 feet long
(1). A roll of paper covers 20 sq feet
(2). There are no windows in the walls

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

Ans: (E).
15). Fifty students have signed up for atleast one of the courses

GERMANI 1 \& ENGLISH 1, how many of the 50 students are taking GERMANI 1 but not ENGLISH 1.?
(1). 16 students are taking GERMANI 1 \& ENGLISH 1
(2). The number of students taking ENGLISH 1 but not GERMANI 1 is the same as the number of students taking GERMANI 1.

Ans: (C)
16). Is ABCD is a square ? $\mathrm{A}-----------\mathrm{B}$
(1). $A D=A B|x|$
(2). $x=90$ (degres) ||
||
D ------------- C
Ans: (E).
17). How much card board will it take to make a rectangular bos with a lid whose base has length 7 inches.
(1). The width of the box 5 inches
(2). The height of the box will be 4 inches

Ans: (C).
18). Did ABC company made profit in 1980 ?
(1). ABC company made a profit in 1979.
(2). ABC company made a profit in 1981.

Ans: (E).
19). How much is Janes salary?
(1). Janes salary is 70\% of John's salary
(2). Johns salary is $50 \%$ of Mary's salary

Ans: (E).
20). Is $x>1$
(1) $x+y=2$
(2) $y<0$ Ans: (c)
21). How many of the numbers $x$ and $y$ are positive? Both $x$ and $y$ are less than 20
(1) $x$ is less than 5
(2) $x+y=24$

Ans: (B)
22). Is the angle ACB is right angle A
(1). $y=z \mid \backslash$
(2). $(\mathrm{AC})^{\wedge} 2+\mathrm{CB} \wedge 2=\mathrm{AB} \wedge 2 \mid \mathrm{z} \backslash$
|
|
|
|x y
C -------- B
Ans: (B).
23). How far it from town $A$ to town $B$ ? Town $C$ is 12 miles east of town A
(1). Town C is south of town B
(2). It is 9 miles from town $B$ to town $C$

Ans :(C)
24). A rectangular field is 40 yards long. Find the area of the field.
(1). A fence around the boundary of the field is 140 yards long
(2). The field is more than 20 yards width

Ans: (A).
25). An industrial plant produces bottles. In 1961 the number of bottles produced by the plant was twice the number of produced in 1960. How many bottles were produced altogether in the year 1960, 61,\&62
(1). In 1962 the number of bottles produced was 3 times the number of produced in 1980
(2). In 1963 the number of bottles produced was one half the total produced in the years $1960,1961,1962$.

Ans: (E).
26). Is $x y>1$ ? $x \& y$ are both positive
(1) $x$ is less than 1
(2) $y$ is greater than 1

Ans: (E)
27). Is it a Rambus
(1). All four sides are equal / /
(2) Total internal angle is / /

360 / /
Ans: (E)
28). How many books are in the book shelf
(1) The book shelf is 12 feet long
(2). The average weight of each book is 1.2 pound

Ans: (E).
29). What is the area of circle?
(1). Radius $r$ is given
(2). Perimeter is 3 times the area

Ans: (A).

## ARITHMATIC

1). Total distance is 120 km . Going by 60kmph and coming back by
2). A school have 30\% from MAHARASTRA .Out of this $20 \%$ from BOMBAY students. Find the total percentage of BOMBAY
Ans: 6\%
3). An equilateral triangle of side 3 inch is given. How many equilateral triangles of side 1 inch can be formed from it
Ans: 9
4). $\mathrm{A} / \mathrm{B}=3 / 515 \mathrm{~A}=$ ?

Ans: 9B
5). Each side of a rectangle is increased by $100 \%$.

How much the percentage of area will be increased
Ans : 300\%
6). Perimeter of the back whell $=9$ feet, front wheel $=7$ feet on a certain distance the front wheel gets 10 revolutions more than back wheel . what is the distance?

Ans: 315 feet.
7). Perimeter of front wheel $=30$, back wheel $=20$. If front wheel revolves 240 times. Howm many revolutions will the back wheel take? Ans: 360 times
8). 205 of 6 liter solution and $60 \%$ of 4 liter solution is mixed What percentage of the mixture of solution
Ans: 36\%
9). City A population is 68000, decreasing at a rate of 80 per year City B having population 42000 increasing at a rate of 120 per year. In how many years both the cities will have same population
Ans: 130 years
10). Two cars, 15 km apart one is turning at a speed of 50 kmph other at 40 kmph . How will it take to two cars meet.
Ans 3/2 hours
11). A person wants to buy 3 paise and 5 paise stamps costing exactly one rupee. If he buys which of the following number of stamps. he wont able to buy 3 paise stamps

Ans: 9
12). There are 12 boys and 15 girls, How many different dancing groups can be formed.
Ans: 180
13). Which of the following fractions is less than $1 / 3$
(1) $22 / 62$ (2) $15 / 46$

Ans: 15/46
14). Two circles , one circle is inscribed and another circle is outscribed over a square. What is the ratio of area of inner to outer circle.
Ans: 1:2
Plumber problem (15-17)
Miss Dean wnats to renovate her house. She hires a plumber, a carpenter, a painter an electricial and interior deorator. The work to be finished in one working (Monday - Friday ). Each worker will take the full day to do his job. Miss Dean permit only one person to work each day.
I. The painter cna work only after the plumber and the carpenter have finished their jobs
II. The interior decorator must do his job before the electrician.
III. The carpenter cannot work on Monday or Tuesday
15) If the painter work on Thursday, which one of the following alternatives is possible?
(A) The electrician works on Tuesday.
(B). The electrician works on Friday.
(C) The interior decorator works after the painter does.
(D). The painter works on consecutive days
(E). Miss Dean cannot fit all of the workers int schedule

Ans: (B).
16). If the painter works on Friday which of the following must be false?
(A). The carpenter may works on Wednesday
(B). The carpenter and the electrician may work on consecutive days
(C). If the carpenter works on Thursday, the electrician has to work on wednesday
(D). The plumber may work before the electrician does
(E). The electrician may work on Tuesday

Ans: (C).
17). Which argument is possible?
(A). The electrician will works on Tuesday and the interior decorator on Friday
(B). The painter will work on wednesday and plumber on thursday
(C). The carpenter will works on Tuesday and the painter on Friday
(D). THe painter will work on Monday and the carpenter on Thursday
(E). The carpenter will work on Wednesday and the plumber on Thursday

Ans: (E).
$* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *$
There is one section Figures, like 4 figures are given and we have to find the next one. In this 10 question are given

## CMC Placement Papers

Analytical Reasoning

Directions for questions 1-5: The questions are based on the information given below
There are six steps that lead from the first to the second floor. No two people can be on the same step
Mr. A is two steps below Mr. C
Mr. B is a step next to Mr. D
Only one step is vacant ( No one standing on that step )
Denote the first step by step 1 and second step by step 2 etc.

1. If Mr. A is on the first step, Which of the following is true?
(a) Mr. B is on the second step
(b) Mr. C is on the fourth step.
(c) A person Mr. E, could be on the third step
(d) Mr. D is on higher step than Mr. C.

Ans: (d)
2. If Mr. E was on the third step \& Mr. B was on a higher step than Mr. E which step must be vacant
(a) step 1
(b) step 2
(c) step 4
(d) step 5
(e) step 6

Ans: (a)
3. If Mr. B was on step 1 , which step could A be on?
(a) 2\&e only
(b) $3 \& 5$ only
(c) $3 \& 4$ only
(d) $4 \& 5$ only
(e) $2 \& 4$ only

Ans: (c)
4. If there were two steps between the step that A was standing and the step that B was standing on, and A was on a higher step than D , A must be on step
(a) 2
(b) 3
(c) 4
(d) 5
(e) 6

Ans: (c)
5. Which of the following is false
i. B\&D can be both on odd-numbered steps in one configuration
ii. In a particular configuration A and C must either both an odd numbered steps or both an even-numbered steps
iii. A person E can be on a step next to the vacant step.
(a) i only
(b) ii only
(c) iii only
(d) both i and iii

Ans: (c)

Directions for questions 6-9: The questions are based on the information given below
Six swimmers A, B, C, D, E, F compete in a race. The outcome is as follows.
i. B does not win.
ii. Only two swimmers separate E \& D
iii. A is behind D \& E
iv. B is ahead of $E$, with one swimmer intervening
$v . F$ is a head of $D$
6. Who stood fifth in the race ?
(a) A
(b) B
(c) C
(d) D
(e) E

Ans: (e)
7. How many swimmers seperate A and F ?
(a) 1
(b) 2
(c) 3
(d) 4
(e) cannot be determined

Ans: (d)
8. The swimmer between C \& E is
(a) none
(b) F
(c) D
(d) B
(e) A

Ans: (a)
9. If the end of the race, swimmer D is disqualified by the Judges then swimmer B finishes in which place
(a) 1
(b) 2
(c) 3
(d) 4
(e) 5

Ans: (b)

Directions for questions 10-14: The questions are based on the information given below
Five houses lettered A,B,C,D, \& E are built in a row next to each other. The houses are lined up in the order A,B,C,D, \& E. Each of the five houses has a colored chimney. The roof and chimney of each housemust be painted as follows.
i. The roof must be painted either green,red ,or yellow.
ii. The chimney must be painted either white, black, or red.
iii. No house may have the same color chimney as the color of roof.
iv. No house may use any of the same colors that the every next house uses.
v. House E has a green roof.
vi. House B has a red roof and a black chimney
10. Which of the following is true ?
(a) At least two houses have black chimney.
(b) At least two houses have red roofs.
(c) At least two houses have white chimneys
(d) At least two houses have green roofs
(e) At least two houses have yellow roofs

Ans: (c)
11. Which must be false ?
(a) House A has a yellow roof
(b) House A \& C have different color chimney
(c) House D has a black chimney
(d) House E has a white chimney
(e) House B\&D have the same color roof.

Ans: (b)
12. If house C has a yellow roof. Which must be true.
(a) House E has a white chimney
(b) House E has a black chimney
(c) House E has a red chimney
(d) House D has a red chimney
(e) House C has a black chimney

Ans: (a)
13. Which possible combinations of roof \& chimney can house
I. A red roof 7 a black chimney
II. A yellow roof \& a red chimney
III. A yellow roof \& a black chimney
(a) I only
(b) II only
(c) III only
(d) I \& II only
(e) I\&II\&III

Ans: (e)
14. What is the maximum total number of green roofs for houses
(a) 1
(b) 2
(c) 3
(d) 4
(e) 5

NOTE: The questions from 15-27 are multiple choice in the paper
15. There are 5 red shoes, 4 green shoes. If one draw randomly a shoe what is the probability of getting a red shoe

Ans 5c1/ 9c1
16. What is the selling price of a car? If the cost of the car is Rs. 60 and a profit of $10 \%$ over selling price is earned

Ans: Rs 66/-
17. $1 / 3$ of girls , $1 / 2$ of boys go to canteen. What factor and total number of classmates go to canteen.

Ans: Cannot be determined.
18. The price of a product is reduced by $30 \%$. By what percentage should it be increased to make it $100 \%$

Ans: 42.857\%
19. There is a square of side 6 cm . A circle is inscribed inside the square. Find the ratio of the area of circle to square.

Ans. 11/14
20. There are two candles of equal lengths and of different thickness. The thicker one lasts of six hours. The thinner 2 hours less than the thicker one. Ramesh lights the two candles at the same time. When he went to bed he saw the thicker one is twice the length of the thinner one. How long ago did Ramesh light the two candles .

Ans: 3 hours.
21. If $\mathrm{M} / \mathrm{N}=6 / 5$,then $3 \mathrm{M}+2 \mathrm{~N}=$ ?
22. If $\mathrm{p} / \mathrm{q}=5 / 4$, then $2 \mathrm{p}+\mathrm{q}=$ ?
23. If PQRST is a parallelogram what it the ratio of triangle PQS \& parallelogram PQRST .

Ans: 1:2
24. The cost of an item is Rs 12.60 . If the profit is $10 \%$ over selling price what is the selling price?

Ans: Rs 13.86/-
25. There are 6 red shoes $\& 4$ green shoes. If two of red shoes are drawn what is the probability of getting red shoes

Ans: 6c2/10c2
26. To 15 lts of water containing $20 \%$ alcohol, we add 5 lts of pure water. What is \% alcohol.

Ans: 15\%
27. A worker is paid Rs.20/- for a full days work. He works $1,1 / 3,2 / 3,1 / 8.3 / 4$ days in a week. What is the total amount paid for that worker ?

Ans: 57.50
28. If the value of $x$ lies between $0 \& 1$ which of the following is the largest?
(a) $x$
(b) $x 2$
(c) $-x$
(d) $1 / x$

Ans: (d)

Data Sufficiency

Directions: For questions in this section mark
(a) If condition (i) alone is sufficient
(b) If condition (ii) alone is sufficient
(c) If both conditions together are sufficient
(d) If condition (i) alone \& (ii) alone are sufficient
(e) information not sufficient

1. A man 6 feet tall is standing near a light on the top of a pole What is the length of the shadow cast by the man.
(i) The pole is 18 feet high
(ii) The man is 12 feet from the pole

Ans: (c)
2. Two pipes $A$ and $B$ emptied into a reservoir, pipe $A$ can fill the reservoir in 30 minutes by itself. How long it will take for pipe $A$ and pipe $B$ together to fill up the reservoir.
(i) By itself, pipe B can fill up the reservoir in 20 minutes
(ii) Pipe $B$ has a larger cross-sectional area than pipe A

Ans: (a)
3. K is an integer. Is K is divisible by 12
(i) K is divisible by 4
(ii) K is divisible by 3

Ans: (c)
4. What is the distance from $A$ to $B$
(i) A is 15 miles from C
(2) $C$ is 25 miles from $B$

Ans: (e)
5. Was Melissa Brown's novel published?
(i). If Melissa Brown's novel was published she would receive atleast $\$ 1000$ in royalities during 1978
(ii). Melissa Brown's income for 1978 was over \$1000

Ans: (e)
6. Does every bird fly?
(i) Tigers do not fly.
(ii) Ostriches do not fly

Ans: (b)
7. How much does John weigh? Jim weighs 200 pounds.
(i) Toms weight plus Moes weight equal to John's weight.
(ii) John's weight plus Moe's weight equal to Twice Tom's weight.

Ans: (c)
8. Is the figure $A B C D$ is a rectangle if

(i) angle $\mathrm{ABC}=90$ (degrees)
(ii) $A B=C D$
9. Find $x+2 y$
(i). $x+y=10$
(ii). $2 x+4 y=20$

Ans: (b)
10. Is angle $B A C$ is a right angle
(i) $A B=2 B C$
(2) $\mathrm{BC}=1.5 \mathrm{AC}$

Ans: (e)
11. Is $x$ greater than $y$
(i) $x=2 k$
(ii) $k=2 y$

Ans: (e)
12. A piece of string 6 feet long is cut into three smaller pieces. How long is the longest of the three pieces?
(i). Two pieces are the same length.
(ii) One piece is 3 feet 2 inches lone

Ans: (b)
13. How many rolls of wall paper are necessary to cover the walls of a room whose floor and ceiling are rectangles 12 feet wide and 15 feet long
(i) A roll of paper covers 20 sq feet
(ii) There are no windows in the walls

Ans: (e)
14. $x$ and $y$ are integers that are both less than 10. Is $x>y$ ?
(i). $x$ is a multiple of 3
(ii). y is a multiple of 2

Ans: (e)
15. Fifty students have signed up for atleast one of the courses GERMAN \& ENGLISH, how many of the 50 students are taking GERMANI but not ENGLISH?
(i). 16 students are taking GERMANI \& ENGLISH
(ii). The number of students taking ENGLISH but not GERMANI is the same as the number of students taking GERMAN

Ans: (c)
16. Is $A B C D$ is a square ? $A$---------- $B$
(1). $A D=A B|x|$
(2). $x=90$ (degres) ||
||
D ------------- C
Ans: (E).
17. How much card board will it take to make a rectangular box with a lid whose base has length 7 inches.
(i). The width of the box 5 inches
(ii). The height of the box will be 4 inches

Ans: (c)
18. Did ABC company made profit in 1980 ?
(i) ABC company made a profit in 1979.
(ii) ABC company made a profit in 1981.

Ans: (e)
19. How much is Janes salary?
(i). Janes salary is 70\% of John's salary
(ii). Johns salary is 50\% of Mary's salary

Ans: (e)
20. Is $x>1$
(i) $x+y=2$
(ii) $y<0$

Ans: (c)
21. How many of the numbers, $x$ and $y$ are positive? Both $x$ and $y$ are less than 20.
(i) $x$ is less than 5
(ii) $x+y=24$

Ans: (b)
22. Is the angle ACB is right angle
(1) $A C=C B$
(2). (AC) $2+C B 2=A B 2$

Ans: (b)
23. How far it from town $A$ to town $B$ ? Town $C$ is 12 miles east of town $A$
(i). Town $C$ is south of town $B$
(ii). It is 9 miles from town $B$ to town $C$

Ans: (c)
24. A rectangular field is 40 yards long. Find the area of the field.
(i). A fence around the boundary of the field is 140 yards long
(ii). The field is more than 20 yards width

Ans: (a)
25. An industrial plant produces bottles. In 1961 the number of bottles produced by the plant was twice the number of produced in 1960. How many bottles were produced altogether in the year 1960, 61,\&62
(i). In 1962 the number of bottles produced was 3 times the number of produced in 1980
(ii). In 1963 the number of bottles produced was one half the total produced in the years 1960,1961,1962.

Ans: (e)
26. Is $x y>1$ ? If $x \& y$ are both positive
(i) $x$ is less than 1
(ii) $y$ is greater than 1

Ans: (e)
27. Is it a Rhombus
(i) All four sides are equal
(ii) Total internal angle is 360

Ans: (e)
28. How many books are in the book shelf
(i) The book shelf is 12 feet long
(ii). The average weight of each book is 1.2 pound

Ans: (e)
29. What is the area of the circle?
(i) Radius $r$ is given
(ii) Perimeter is 3 times the area

Ans: (a)

## Arithmatic Section

1. If the total distance of a journey is 120 km . If one goes by 60 kmph and comes back at 40 kmph what is the average speed during the journey?

Ans: 48kmph
2. A school has $30 \%$ students from Maharashtra . Out of these $20 \%$ are Bombey students. Find the total percentage of Bombay?

Ans: 6\%
3. An equilateral triangle of sides 3 inch each is given. How many equilateral triangles of side 1 inch can be formed from it?

Ans: 9
4. If $A / B=3 / 5$,then $15 A=$ ?

Ans: 9B
5. Each side of a rectangle is increased by $100 \%$.By what percentage does the area increase?

Ans: 300\%
6. Perimeter of the back wheel $=9$ feet, front wheel $=7$ feet on a certain distance, the front wheel gets 10 revolutions more than the back wheel .What is the distance?

Ans: 315 feet.
7. Perimeter of front wheel $=30$, back wheel $=20$. If front wheel revolves 240 times. How many revolutions will the back wheel take?

Ans: 360 times
8. $20 \%$ of a 6 litre solution and $60 \%$ of 4 litre solution are mixed. What percentage of the mixture of solution

Ans: 36\%
9. City A's population is 68000 , decreasing at a rate of 80 people per year. City $B$ having population 42000 is increasing at a rate of 120 people per year. In how many years both the cities will have same population?

Ans: 130 years
10. Two cars are 15 kms apart. One is turning at a speed of 50 kmph and the other at 40 kmph . How much time will it take for the two cars to meet?

Ans: $3 / 2$ hours
11. A person wants to buy 3 paise and 5 paise stamps costing exactly one rupee. If he buys which of the following number of stamps he won't able to buy 3 paise stamps.

Ans: 9
12. There are 12 boys and 15 girls, How many different dancing groups can be formed with 2 boys and 3 girls.
13. Which of the following fractions is less than $1 / 3$
(a) $22 / 62$
(b) $15 / 46$
(c) $2 / 3$
(d) 1

Ans: (b)
14. There are two circles, one circle is inscribed and another circle is circumscribed over a square. What is the ratio of area of inner to outer circle?

Ans: $1: 2$

Directions for questions 15-17: The questions are based on the information given below

Miss Dean wants to rennovate her house. She hires a plumber, a carpenter, a painter, an electrician and an interior decorator. The work to be finished in one working (Monday - Friday ).
Each worker will take the full day to do his job. Miss Dean permits only one person to work each day.
I. The painter can work only after the plumber and the carpenter have finished their jobs
II. The interior decorator must do his job before the electrician.
III. The carpenter cannot work on Monday or Tuesday
15. If the painter work on Thursday, which one of the following alternatives is possible?
(a) The electrician works on Tuesday.
(b). The electrician works on Friday.
(c) The interior decorator works after the painter does.
(d). The painter works on consecutive days.
(e). Miss Dean cannot fit all of the workers int schedule

Ans: (b)
16. If the painter works on Friday which of the following must be false?
(a). The carpenter may works on Wednesday
(b). The carpenter and the electrician may work on consecutive days (c). If the carpenter works on Thursday, the electrician has to work on Wednesday
(d). The plumber may work before the electrician does
(e). The electrician may work on Tuesday

Ans: (c)

## 17. Which argument is possible?

(a). The electrician will works on Tuesday and the interior decorator on Friday
(b). The painter will work on wednesday and plumber on thursday
(c). The carpenter will works on Tuesday and the painter on Friday
(d). THe painter will work on Monday and the carpenter on Thursday
(e). The carpenter will work on Wednesday and the plumber on Thursday

Ans: (e)

## CMC Placement Paper

## General:

1. Mention five topics in which you are comfortable. (So be sure what are you comfortable with and in which topics you are quite confident of yourself.)
2. What are your future plans?
3. What is your EAMCET rank and why didn't you join other Engineering colleges?
4. Why did you opt for CMC?
5. What is your standing in your class?
6. If you are given a chance to choose higher studies and job, which would you prefer and why?

Technical:

1. In what way are data warehouses different from databases? (This has taken most of my time, since we got into a discussion of each and every aspect. Some important aspects touched upon are: OLTP transactions and OLAP transactions, querying, response-time of a database, load on the database, query processing etc.).
2. What is a view? What is the use of a view?
3. What do you find most interesting about Digital Signal

Processing/Processors.
4. In what way a Digital Signal Processor is different from a generic Intel Processor
5. Could you draw the block diagram of a simple processor like INTEL 8088?
6. Can you give the number of address lines and data lines in INTEL 8088?
7. Could you pictorially draw the memory architecture in Digital Signal Processor?
8. Why need of a separate family of processors - Digital Signal

Processors.
9. Could tell us just one practical application of Digital Signal

Processor where it is highly relevant to use a DSP.
10 . What is a dirty bit? What is it that led to the evolution of the whole concept of dirty bit?
11. What is an operating system?
12. On which operating systems have you worked?
13. Why do we need an Operating System?
14. I have to load a program/data into main memory whose size is more than that of main memory? Could you explain the process that takes place in the Operating System to manage such situations? (Paging and Buffer Management, explain)
15. How are priorities set to a process? Are they given by a user or by the system?
16. Are CPU Scheduling and Process Scheduling different?
17. How is memory allocated to processes in a multi-processing environment?
18. Which programming languages are you comfortable with?
19. What are various types on 'int' one can have in C?
20. What is the difference between those types i.e. short, long etc?
21. What is a structure in C? Why the need of such a feature? Could you write a sample structure and explain?
22. On which C compiler do you work? What is the length of short int?
23. What is the use of a static variable in C ?

1. What is virtual Memory?
2. Write the hexadecimal equivalent of 258 .
3. What is Line Algoritham?
4. Why is the first form of normalization so defined ( Databases ).
5. Why do we have different forms like hexadecimal, 2's complement,octal etc ?
6. define operating system.
7. what is deadlock ? give a real-life example of deadlock .

Lalitha

1) What is Referential Integrity?
2) What is the advantage of maintaining the data in the database over storing it in flat files?
3) Explain the 3 normal forms?
4) Why do you have to normalize a schema?
5) What are the problems of having redundancy in the schema?
6) Have you heard of Codd's rules?
7) All variables in C should have a data type. Do you agree? The, what is the data type of a pointer?
8) If you write C code in Turbo C, compile and get an executable out of it, will you be able to run the executable in Unix or Linux? Why?
9) What is the size of an integer? Is it the same always \& everywhere? If so , why cant you use the same object code (produced in one OS) and run it on another OS?
10) How about java? What makes java platform independent?
11) Write a program to count the number of 1's in the binary representation of a given number.
12) Denormalisation in DataWarehousing \& Data Mining.? Have you heard of it in DWDM course? This was asked in the context of increased redundancy if normalisation not done.

Vijaya Chandra

[^0]Submit your resume to cvs@123eng.com
www. 123eng.com Engineering the Engineers

* What is polymorphism?
* Of the following two implementations of a stack using a vector which is a cleaner version and why?
a) The stack inheriting the vector
b) The stack including a vector member in it

Shravan

1) What is Harvard architecture
2) What is Histogram Equalization
3) write C program for Histogram
4) what is a bridge ? (related to computer networks)
5) what is meant by VHDL
6) and some project related questions like they asked me abt DSP processor used in my project i.e TMS32010

## P Praveen

1. Describe the Embedded project that you did ?
2. What are the different socket calls ?
3. Does distributed databases mean different servers running on different systems or what ??
4. s1 English
s2 French
s3 Japanese
s1 French
Retrieve people who know both English and French ?
5. What exactly is the significance of the 3 normal forms ? How does the first normal form help in achieving this goal of the normal forms ?
6. What is Multiprocessing, Multitasking and Multiuser OS's ?? Specific differences?
7. Is Windows NT a multiprocessing system ?
8. What abt Unix and Win-95 ?
9. What abt DOS ?
10. Explain pointers in simple terminology as if I dont know C ??
11. What are the uses of pointers ?
12. Different parameter passing methods and their explanations ??
13. Parameter passing in C ??
14. Is C a block structured language ?
15. What do U mean by block structure ??
16. How many levels of nesting are possible in C ?
17. Difference between the pointers in C \& Pascal ??
18. Difference between local and global variable ?? Differences in how they are stored?
19. Can a function call another ? Until what level ? How do the calls occur?
20. What kind of language is Algol ?
21. What is reentrant code ??

Vijayender:

## General:

1. How are hub, bridge, switch and router different.
2. When to use the above devices specifically
3. What are different network topologies
4. what is the difference between paging and segmentation
5. what is virtual memory
6. What does fork do
7. What are the differences between a command and a system call in Unix
8. What are mapped files
9. What are the debugging tools that you use?
10. How do you use 'gdb'?
11. What is the definition of a Turing Machine?

Submit your resume to cvs@123eng.com
www.123eng.com Engineering the Engineers

Formal Verification specific:

1. What is an identity element
2. What is an invariant

Mathematics

1. What is a field and what is a group?

G Santosh
Project related?

1. What is XML?
2. What is the difference between XML and HTML?
3. What are the XML tools that you have used?
4. How does XML look in a browser?
5. Which broser and version support XML?
6. How does the browser display an XML document when there are no formatting tags?
7. If XML documents can have any tags and different authors may name the same things differently how can XML be a standard?
8. Why should we not store the XML document as a relation directly without storing the tree structure?
9. If I have a student database should I store it in a relational DBMS or an XML DBMS 10. What is XML based on?
10. If SGML is the superset of XML why not use SGML?

General:

1. What are the advantages of Object oriented programming languges?
2. What are the drawbacks of object oriented programming languages, say C++?
3. What are the other object oriented programming languages (other than $\mathrm{C}++$ )
4. Write the implementation of a stack?
5. What is IPC?
6. What happens when you switch the computer on?
7. What did you learn in Computer Organization, Digital Circuits?
8. What is a Karnaugh map for?
9. What is the difference between combinatorial and sequential circuits?
10. A boolean expression is given. Give the minimum number of gates required to implement the expression.
The expression was something like this ( $\sim$ - not, +- or)
Submit your resume to cvs@123eng.com
www.123eng.com Engineering the Engineers
$\mathrm{a} \sim \mathrm{b}+\mathrm{b} \sim \mathrm{ac}+\mathrm{a} \sim \mathrm{bc}+\sim \mathrm{ac}$
11. What did you learn in AI?
12. What are agents?
13. What are the general errors that you get in $\mathrm{C}++$ ?
14. When and why do you get 'Segmentation Fault'?
15. What is PL-SQL
16. Write down the IT subjects that you have done in your BTech?

Himanshu
Project related :-
What is HTML?
How does the web work?
What is XML, How does it differ from HTML?
What is special about asp.
What does ISCII have which UNICODE doesn't have?
Miscellaneous :-
What is demand paging?
Except for naturality, why is recursion better than
iteration?
Write down a factorial program? Will it compute 2000!
What is virtual memory?
What is JVM? Is it platform independent? What is the environment that it requires/defines?
Write down the definition of a structure for a
point? What is its size? Add a 'byte' to it? Now what is its
size?
Declare a 10X5 integer matrix using pointers?
What is mkfs in Linux?
How is the filesystem organization in Linux?
What is an inode?
Other :-
What is your GRE score?
Would you like to go for GRE later?
What are your areas of interest?

M Santosh
Technical:

1. What is an Embedded System?
2. Is an Embedded system ALWAYS used to assist an Electronic gadget?
3. Give Pin configuration of a 9-pin RS-232 port.
4. Block diagram of your project in Embedded Systems.
5. What is UART ?
6. The interface between a program which is capable of changing the serial port settings and the port itself.
7. What is a circular queue?
8. Its advantages over a normal queue.
9. What is a Switch ?
10. What is a Router?
11. What is a Bridge ?
12. Which is more expensive - router or a switch ? and why ?
13. Can a Bridge be used to interconnect more than 2 LANs ?

Non Technical:

1. Why did you join IIIT ?
2. What was your EAMCET rank ?
3. What is your CGPA ?
4. What is your GRE score ? split ??
5. How important is this job for you?
6. Did you attend for the I-labs interview?
7. Any questions ??

## Techinical:

1. What is a binary tree? (data structures)
2. Inorder, preorder and postorder traversals of a binary tree.
3. Write a program to insert a new node(value) in a binary search tree.
4. Can assembly programming be done in C?
5. Define OS? (operating systems)
6. What is thrashing?
7. What is a deadlock?
8. How does an OS detect a deadlock?
9. What are constraints? (Databases)
10. Write a program to compute the histogram (frequencies of grey levels) of a black \& white image. (Digital Image Processing)

Non-technical:

1. What is your rank in the class?
2. What are your future plans?

NagaKalyan:

1. What is virtual Memory ?
2. Write the hexadecimal equivalent of 258.
3. What is Line Algoritham?
4. Why is the first form of normalization so defined ( Databases ).
5. Why do we have different forms like hexadecimal, 2's complement, octal etc ?
6. define operating system.
7. what is deadlock ? give a real-life example of deadlock .

Naveen:
project:

1) Explain the project with the help of block diagrams
2) What exactly happens when a signal is sampled at the receiving end. How does the sampling circuit look like.
3 ) How is the convolution of two different signals done. What does the result suggests.
3) Explain the TMS DSP processor's architecture.
4) Why are we using DSP processor other than normal processor. Advantages??

General:

1) What is India's position in the current Hockey world cup being held in Malaysia.(As on the day of interview)
2) In Linux, list some commands

What is shell and what are the advantages of various shell variables. Have you ever used them while programming.
3) What are the various types of files generated when a c file is compiled in linux. What in general happens when a file is compiled.
4) What are shared libraries in unix. How do they differ from the normal ones.
5) What is virtual memory.
6) What is line algorithm.
c:

1) What's the use of sizeof( ) function... since one can always directly write number of bytes instead of calling the function.
2) Depict the values:
int $\mathrm{p}=-200$;
char c;
c = p;
printf("\%d\t\%d", c++, ++c);

I-Labs
Kaushik

1. Why do you want to pursue a job at I-labs.
2. If someone asks you very low level questions how would you feel.
3. If you had a choice between higher education and Job, what would you prefer and why.
4. How important are your past achievements for you.
5. What is the difference between LIFO and FIFO
6. What are the main aspectal differences between Java and C++.
7. What is Morphing
8. What is the meaning of Normalization
9. What is inheritence
10. If you had to choose between inherting and creating an instance in the new context of a new class what would you prefer and why
11. If there is a database of book with the title and authors and number of copies, what additional details do you need to decided upon the model of your database architecture.
12. How do you rate yourself in comparision of your classmates.
13. Why would you work for two years and pursue the next degree and not immediately. (Incase i do a job)

## Technical

- What is First Normalization
- What is Second Normalization
- What is polymorphism in OOAD
- What do you mean by extending a class in JAVA
- What is encapsulation

General

- Why did you choose IIIT for your graduate studies
- What did you learn as a TA
- What are your strenghts
- Why are you not interested in doing MS or higher studies
- Given a choice, would you work in a huge company or a startup small company when the payscales are equal

P Praveen

1. Tell me something abt Ur family ??
2. What is Ur EAMCET rank ??
3. Why did U join IIIT ??
4. Did U think Ur decision is correct ??
5. What do $U$ think $U$ can contribute to i-Labs ??
6. With 2220 GRE score why do U want to join us ??kkk

## CMC Placement

## Test Type: Objective type multiple choice Exam <br> Test Duration: 1½ hour

Test consists of two sections.

## Section-1 (non-Technical)

Number of Questions : 91
Time Duration : 1 hour
Part-1: It consists of 20 verbal questions.
a) b)
c)
d)

Part-2: In this a passage has given and 4 questions.
Passage has given on private sector management and labor policies. Questions are mainly
based on the conclusions that can be drawn from the passage.

Part-3: 20 arithmetic questions (easy to solve)

Part-4: 20 Basic Mathematics questions taken from $9^{\text {th }}, 10^{\text {th }}$ and intermediate standard.

Mainly on Triangle properties and simples calculations. (Easy to solve)

For all the 20 questions: Two expressions are given in the left and right sides.

Your answer is

A, if Left hand side value is bigger
$B$, if right hand side value is bigger
C, if both are equal
D, if both are not equal
$E$, if it is not possible to conclude the relation
E.g. left side Right Side
$1 / 2+1 / 2 \quad 1$

For this Ans is C.

Part-5: 7 questions on data sufficiency.

Part-6: 9 questions on Analytical reasoning.
Submit your resume to cvs@123eng.com www.123eng.com Engineering the Engineers

1. This questions is based on relations between persons of a family.Like, $F$ is father of two
children of different gender.
$A$, $G$ has same gender as $C H$, who is mother of $B$ is sister of $D$ $\qquad$
(Constraint is one should not marry their direct sibling) Questions are like
2. Totally how many male and females are there in the family.
3. According to the given data to whom D can marry .etc.
4. A certain city is served by subway lines $A, B$ and $C$ and numbers 1 2 and 3.When it snows, morning service on B is delayed. When it rains or snows, service on A, 2 and 3 are delayed both in the morning and afternoon When temp. falls below 30 degrees Fahrenheit afternoon service is cancelled in either the A line or the 3 line, but not both. When the temperature rises over 90 degrees Fahrenheit, the afternoon service is cancelled in either the line $C$ or the 3 line but not both. When the service on the A line is delayed or cancelled, service on the $C$ line which connects the A line, is delayed. When service on the 3 line is cancelled, service on the $B$ line that connects the 3 line is delayed.
5. On Jan 10th, with the temperature at 15-degree Fahrenheit, it snows all day. On how many lines will service be affected, including both morning and afternoon?
(A) 2 (B) 3 (C) 4 (D) 5
6. On Jan 10th, with the temperature at 15-degree Fahrenheit, it snows all day. On how many lines will service be affected, including both morning and afternoon?
(A) 2 (B) 3 (C) 4 (D) 5
7. On Aug 15th with the temperature at 97 degrees Fahrenheit it begins to rain at 1 PM. What is the minimum number of lines on which service will be affected?
(A) 2 (B) 3 (C) 4 (D) 5
8. On which of the following occasions would service be on the greatest number of lines disrupted.
(A) A snowy afternoon with the temperature at 45-degree Fahrenheit
(B) A snowy morning with the temperature at 45 degree Fahrenheit
(C) A rainy afternoon with the temperature at 45 degree Fahrenheit
(D) A rainy afternoon with the temperature at 95 degree Fahrenheit

## CMC Placement Paper

1. Unix $O S$ is a
a) multi-taks b) mutual task c)multiple processe d)a\&c

2 The TV Satilite Transmission is a
a) Half-Duplex b) Full Duplex c) one-way duplex d)non of the above

3 Which among is the OOPL
a) c b) java c) Cobol d) PAscal

4 what will be the output of

$$
\operatorname{main}()
$$

\{
int $a=5, c$;
int ptr;
ptr=\&a;
c=*ptr * a;
a) 5,5
b) 25,25
c) 25,5
d) Error

5 What can a Friend Keywoard do?
a) Free the memory
b) provide access to private \& public variables
c) provide access to Private ,Protected, public variables.
d) never allowed to acccess any constructor
6. Abstract Class can be
a) Accessed as Constructors
b) used for hiding information of class
c) class is Abstract class
d) none of the above
7. The present LAn-card Supports
a)32kbphs
b) 64 kbphs
c) 128 kbphs
d) 256 kbphs
8. What is CDMA Technology ?
a) Electronic calculator
b) Cellular phones
c) Rocket
d) Car
9. What is GC in JAVA?
a) De-allocates the memory
b) De-allocates the objects \& its reference
c) Finalising of Memory
d) non-of the above

10 which among is thread class?
a) sleep()
b) IsAliva()
c) IsLive()
d) none of the above
11) main()
\{
int $x=10, y=5, p, q$;
$p=x>9$;
$q=x>3 \& \& y!=3 ;$
printf("p=\%d q=\%d",p,q);
\}ans:1,1.
12. main()
\{
int $x=11, y=6, z ;$
$z=x==5$ || ! $=4$;
printf("z=\%d",z);
\}ans:1
13) main() \{
int $c=0, d=5, e=10, a ;$
$a=c>1 ? d>1| | e>1 ? 100: 200: 300 ;$
printf("a=\%d",a);
\}ans:300
14) main()
\{

```
        int i=-5,j=-2;
junk(i,&j);
    printf("i=%d,j=%d",i,j);
}
junk(i,j)
    int i,*j
{
    i=i*i;
    *j=*j**j;
}
ans:-5,4;
```

15. \#define NO
\#define YES
main()
\{
int $\mathrm{i}=5, \mathrm{j}$;
if(i>5)
$j=Y E S$;
else
$j=N O$;
printf("\%d",j);
\}
ans:Error message
16. main()
\{
int $\mathrm{a}=0 \mathrm{xff}$;
if(a<<4>>12)
printf("leftist)
else
```
17. main()
    {
        int i=+1;
        while(~i)
        printf("vicious circles")
    }
ans:continuous loop.
```

This is only a CMC sample paper. We are not providing you with all the questions just some questions to give you a general idea of the test pattern.

Analytical Reasoning Section:
Directions for questions 1-5: The questions are based on the information given below
There are six steps that lead from the first to the second floor. No two people can be on the same step
Mr. A is two steps below Mr. C
Mr. B is a step next to Mr. D
Only one step is vacant ( No one standing on that step )
Denote the first step by step 1 and second step by step 2 etc.

1. If Mr. A is on the first step, Which of the following is true?
(a) Mr. B is on the second step
(b) Mr. C is on the fourth step.
(c) A person Mr. E, could be on the third step
(d) Mr. D is on higher step than Mr. C.

Ans: (d)
2. If Mr. E was on the third step \& Mr. B was on a higher step than Mr. E which step must be vacant
(a) step 1
(b) step 2
(c) step 4
(d) step 5
(e) step 6

Ans: (a)
3. If Mr. B was on step 1 , which step could A be on?
(a) 2\&e only
(b) $3 \& 5$ only
(c) $3 \& 4$ only
(d) $4 \& 5$ only
(e) $2 \& 4$ only

Ans: (c)
4. If there were two steps between the step that A was standing and the step that B was standing on, and A was on a higher step than D, A must be on step
(a) 2
(b) 3
(c) 4
(d) 5
(e) 6

Ans: (c)
5. Which of the following is false
i. B\&D can be both on odd-numbered steps in one configuration
ii. In a particular configuration A and C must either both an odd numbered steps or both an even-numbered steps
iii. A person E can be on a step next to the vacant step.
(a) i only
(b) ii only
(c) iii only
(d) both i and iii

Ans: (c)

Directions for questions 6-9: The questions are based on the information given below

Six swimmers A, B, C, D, E, F compete in a race. The outcome is as follows.
i. B does not win.
ii. Only two swimmers separate E \& D
iii. $A$ is behind $D \& E$
iv. B is ahead of $E$, with one swimmer intervening
$v . F$ is a head of $D$
6. Who stood fifth in the race ?
(a) A
(b) B
(c) C
(d) D
(e) E

## Ans: (e)

7. How many swimmers seperate A and F ?
(a) 1
(b) 2
(c) 3
(d) 4
(e) cannot be determined

Ans: (d)
8. The swimmer between $\mathrm{C} \& \mathrm{E}$ is
(a) none
(b) F
(c) D
(d) B
(e) A

Ans: (a)
9. If the end of the race, swimmer D is disqualified by the Judges then swimmer B finishes in which place
(a) 1
(b) 2
(c) 3
(d) 4
(e) 5

Ans: (b)

Directions for questions 10-14: The questions are based on the information given below
Five houses lettered A,B,C,D, \& E are built in a row next to each other. The houses are lined up in the order A,B,C,D, \& E. Each of the five houses has a colored chimney. The roof and chimney of each housemust be painted as follows.
i. The roof must be painted either green,red ,or yellow.
ii. The chimney must be painted either white, black, or red.
iii. No house may have the same color chimney as the color of roof.
iv. No house may use any of the same colors that the every next house uses.
v. House E has a green roof.
vi. House B has a red roof and a black chimney
10. Which of the following is true ?
(a) At least two houses have black chimney.
(b) At least two houses have red roofs.
(c) At least two houses have white chimneys
(d) At least two houses have green roofs
(e) At least two houses have yellow roofs

Ans: (c)
11. Which must be false ?
(a) House A has a yellow roof
(b) House A \& C have different color chimney
(c) House D has a black chimney
(d) House E has a white chimney
(e) House B\&D have the same color roof.

Ans: (b)
12. If house $C$ has a yellow roof. Which must be true.
(a) House E has a white chimney
(b) House E has a black chimney
(c) House E has a red chimney
(d) House D has a red chimney
(e) House C has a black chimney

Ans: (a)
13. Which possible combinations of roof \& chimney can house
I. A red roof 7 a black chimney
II. A yellow roof \& a red chimney
III. A yellow roof \& a black chimney
(a) I only
(b) II only
(c) III only
(d) I \& II only
(e) I\&II\&III

Ans: (e)
14. What is the maximum total number of green roofs for houses
(a) 1
(b) 2
(c) 3
(d) 4
(e) 5

Note: The questions from 15-27 are multiple choice in the paper
15. There are 5 red shoes, 4 green shoes. If one draw randomly a shoe what is the probability of getting a red shoe

Ans 5c ${ }_{1} / 9 c_{1}$
16. What is the selling price of a car? If the cost of the car is Rs. 60 and a profit of $10 \%$ over selling price is earned

Ans: Rs 66/-
17. $1 / 3$ of girls , $1 / 2$ of boys go to canteen. What factor and total number of classmates go to canteen.

Ans: Cannot be determined.
18. The price of a product is reduced by $30 \%$. By what percentage should it be increased to make it $100 \%$

Ans: 42.857\%
19. There is a square of side 6 cm . A circle is inscribed inside the square. Find the ratio of the area of circle to square.

Ans. 11/14
20. There are two candles of equal lengths and of different thickness. The thicker one lasts of six hours. The thinner 2 hours less than the thicker one. Ramesh lights the two
candles at the same time. When he went to bed he saw the thicker one is twice the length of the thinner one. How long ago did Ramesh light the two candles .

Ans: 3 hours.
21. If $M / N=6 / 5$, then $3 M+2 N=$ ?
22. If $\mathrm{p} / \mathrm{q}=5 / 4$, then $2 \mathrm{p}+\mathrm{q}=$ ?
23. If PQRST is a parallelogram what it the ratio of triangle PQS \& parallelogram PQRST.

Ans: 1:2
24. The cost of an item is Rs 12.60 . If the profit is $10 \%$ over selling price what is the selling price ?

Ans: Rs 13.86/-
25. There are 6 red shoes $\& 4$ green shoes. If two of red shoes are drawn what is the probability of getting red shoes

Ans: $6 \mathrm{c}_{2} / 10 \mathrm{c}_{2}$
26. To 15 lts of water containing $20 \%$ alcohol, we add 5 lts of pure water. What is $\%$ alcohol.

Ans : 15\%
27. A worker is paid Rs.20/- for a full days work. He works $1,1 / 3,2 / 3,1 / 8.3 / 4$ days in a week. What is the total amount paid for that worker ?

Ans: 57.50
28. If the value of $x$ lies between $0 \& 1$ which of the following is the largest?
(a) $x$
(b) $x^{2}$
(c) $-x$
(d) $1 / x$

Ans: (d)

Data Sufficiency Section:

Directions : For questions in this section mark
(a) If condition (i) alone is sufficient
(b) If condition (ii) alone is sufficient
(c) If both conditions together are sufficient
(d) If condition (i) alone \& (ii) alone are sufficient
(e) information not sufficient

1. A man 6 feet tall is standing near a light on the top of a pole What is the length of the shadow cast by the man.
(i) The pole is 18 feet high
(ii) The man is 12 feet from the pole

Ans: (c)
2. Two pipes A and B emptied into a reservoir , pipe A can fill the reservoir in 30 minutes by itself. How long it will take for pipe A and pipe B together to fill up the reservoir.
(i) By itself, pipe B can fill up the reservoir in 20 minutes
(ii) Pipe B has a larger cross-sectional area than pipe A

Ans: (a)
3. K is an integer. Is K is divisible by 12
(i) K is divisible by 4
(ii) K is divisible by 3

Ans: (c)
4. What is the distance from A to B
(i) A is 15 miles from C
(2) $C$ is 25 miles from $B$

Ans: (e)
5. Was Melissa Brown's novel published?
(i). If Melissa Brown's novel was published she would receive atleast $\$ 1000$ in royalities during 1978
(ii). Melissa Brown's income for 1978 was over $\$ 1000$

Ans: (e)
6. Does every bird fly?
(i) Tigers do not fly.
(ii) Ostriches do not fly

Ans: (b)
7. How much does John weigh? Jim weighs 200 pounds.
(i) Toms weight plus Moes weight equal to John's weight.
(ii) John's weight plus Moe's weight equal to Twice Tom's weight.

Ans: (c)
8. Is the figure ABCD is a rectangle if
(i) angle $\mathrm{ABC}=90$ (degrees)
(ii) $A B=C D$
9. Find $x+2 y$
(i). $x+y=10$
(ii). $2 x+4 y=20$

Ans: (b)
10. Is angle $B A C$ is a right angle
(i) $\mathrm{AB}=2 \mathrm{BC}$
(2) $\mathrm{BC}=1.5 \mathrm{AC}$

Ans: (e)
11. Is x greater than y
(i) $x=2 k$
(ii) $k=2 y$

Ans: (e)
12. A piece of string 6 feet long is cut into three smaller pieces. How long is the longest of the three pieces?
(i). Two pieces are the same length.
(ii) One piece is 3 feet 2 inches lone

Ans: (b)
13. How many rolls of wall paper are necessary to cover the walls of a room whose floor and ceiling are rectangles 12 feet wide and 15 feet long
(i) A roll of paper covers 20 sq feet
(ii) There are no windows in the walls

Ans: (e)
14. $x$ and $y$ are integers that are both less than 10 . Is $x>y$ ?
(i). $x$ is a multiple of 3
(ii). y is a multiple of 2

Ans: (e)
15. Fifty students have signed up for atleast one of the courses GERMAN \& ENGLISH, how many of the 50 students are taking GERMANI but not ENGLISH?
(i). 16 students are taking GERMANI \& ENGLISH
(ii). The number of students taking ENGLISH but not GERMANI is the same as the number of students taking GERMAN

Ans: (c)
16. Is ABCD is a square?


C
D
(i) $\mathrm{AD}=\mathrm{AB}$
(ii). $x=90$ (degres)

Ans: (e)
17. How much card board will it take to make a rectangular box with a lid whose base has length 7 inches.
(i). The width of the box 5 inches
(ii). The height of the box will be 4 inches

Ans: (c)
18. Did ABC company made profit in 1980 ?
(i) ABC company made a profit in 1979.
(ii) ABC company made a profit in 1981.

Ans: (e)
19. How much is Janes salary?
(i). Janes salary is 70\% of John's salary
(ii). Johns salary is 50\% of Mary's salary

Ans: (e)
20. Is $x>1$
(i) $x+y=2$
(ii) $\mathrm{y}<0$

Ans: (c)
21. How many of the numbers, x and y are positive? Both x and y are less than 20.
(i) $x$ is less than 5
(ii) $x+y=24$

Ans: (b)
22. Is the angle ACB is right angle
(1) $\mathrm{AC}=\mathrm{CB}$
(2). $(\mathrm{AC})^{2}+\mathrm{CB}^{2}=\mathrm{AB}^{2}$

Ans: (b)
23. How far it from town $A$ to town $B$ ? Town $C$ is 12 miles east of town $A$
(i). Town $C$ is south of town $B$
(ii). It is 9 miles from town $B$ to town $C$

Ans: (c)
24. A rectangular field is 40 yards long. Find the area of the field.
(i). A fence around the boundary of the field is 140 yards long
(ii). The field is more than 20 yards width

Ans: (a)
25. An industrial plant produces bottles. In 1961 the number of bottles produced by the plant was twice the number of produced in 1960. How many bottles were produced altogether in the year 1960, 61,\&62
(i). In 1962 the number of bottles produced was 3 times the number of produced in 1980 (ii). In 1963 the number of bottles produced was one half the total produced in the years 1960,1961,1962.

Ans: (e)
26. Is $x y>1$ ? If $x \& y$ are both positive
(i) $x$ is less than 1
(ii) y is greater than 1

Ans: (e)
27. Is it a Rhombus
(i) All four sides are equal
(ii) Total internal angle is 360

Ans: (e)
28. How many books are in the book shelf
(i) The book shelf is 12 feet long
(ii). The average weight of each book is 1.2 pound

Ans: (e)
29. What is the area of the circle?
(i) Radius $r$ is given
(ii) Perimeter is 3 times the area

Ans: (a)
Arithmetic Section:

1. If the total distance of a journey is 120 km . If one goes by 60 kmph and comes back at 40kmph what is the average speed during the journey?

Ans: 48kmph
2. A school has $30 \%$ students from Maharashtra .Out of these $20 \%$ are Bombey students. Find the total percentage of Bombay?

Ans: 6\%
3. An equilateral triangle of sides 3 inch each is given. How many equilateral triangles of side 1 inch can be formed from it?

Ans: 9
4. If $\mathrm{A} / \mathrm{B}=3 / 5$, then $15 \mathrm{~A}=$ ?

Ans: 9B
5. Each side of a rectangle is increased by $100 \%$.By what percentage does the area increase?

Ans : 300\%
6. Perimeter of the back wheel $=9$ feet, front wheel $=7$ feet on a certain distance, the front wheel gets 10 revolutions more than the back wheel. What is the distance?

Ans : 315 feet.
7. Perimeter of front wheel $=30$, back wheel $=20$. If front wheel revolves 240 times. How many revolutions will the back wheel take?

Ans: 360 times
8. $20 \%$ of a 6 litre solution and $60 \%$ of 4 litre solution are mixed. What percentage of the mixture of solution

Ans: 36\%
9. City A's population is 68000 , decreasing at a rate of 80 people per year. City B having population 42000 is increasing at a rate of 120 people per year. In how many years both the cities will have same population?

Ans: 130 years
10. Two cars are 15 kms apart. One is turning at a speed of 50 kmph and the other at 40 kmph . How much time will it take for the two cars to meet?

Ans: $3 / 2$ hours
11. A person wants to buy 3 paise and 5 paise stamps costing exactly one rupee. If he buys which of the following number of stamps he won't able to buy 3 paise stamps.

Ans: 9
12. There are 12 boys and 15 girls, How many different dancing groups can be formed with 2 boys and 3 girls.
13. Which of the following fractions is less than $1 / 3$
(a) $22 / 62$
(b) $15 / 46$
(c) $2 / 3$
(d) 1

Ans: (b)
14. There are two circles, one circle is inscribed and another circle is circumscribed over a square. What is the ratio of area of inner to outer circle?

Ans: 1:2
Directions for questions 15-17: The questions are based on the information given below :
Miss Dean wants to rennovate her house. She hires a plumber, a carpenter, a painter, an electrician and an interior decorator. The work to be finished in one working (Monday Friday ).
Each worker will take the full day to do his job. Miss Dean permits only one person to work each day.
I. The painter can work only after the plumber and the carpenter have finished their jobs
II. The interior decorator must do his job before the electrician.
III. The carpenter cannot work on Monday or Tuesday
15. If the painter work on Thursday, which one of the following alternatives is possible?
(a) The electrician works on Tuesday.
(b). The electrician works on Friday.
(c) The interior decorator works after the painter does.
(d). The painter works on consecutive days.
(e). Miss Dean cannot fit all of the workers int schedule

Ans: (b)
16. If the painter works on Friday which of the following must be false?
(a) . The carpenter may works on Wednesday
(b). The carpenter and the electrician may work on consecutive days
(c). If the carpenter works on Thursday, the electrician has to work on Wednesday
(d). The plumber may work before the electrician does
(e). The electrician may work on Tuesday

Ans: (c)

## 17. Which argument is possible?

(a). The electrician will works on Tuesday and the interior decorator on Friday
(b). The painter will work on wednesday and plumber on thursday
(c). The carpenter will works on Tuesday and the painter on Friday
(d). THe painter will work on Monday and the carpenter on Thursday
(e). The carpenter will work on Wednesday and the plumber on Thursday

Submit your resume to cvs@123eng.com
www. 123eng.com Engineering the Engineers

Ans: (e)

## CMC Sample Papers.

## Analogy

1. Auger: carpenter::awl: caobbler
2. ode:song::chant:something can't remember
3. Alarm: trigger::trap:spring
4. scales:justice::torch:liberty
5. witch:coven::actor:troupe

Some data sufficiency questions.

1. The number is two digit number
a. by adding we get 5
b. by subtractin we get 2
ans: both a,b required
2. Given a quadrilateralABCD determine whweter it is rectangle
a. $A B=C D$
b. angle $B=90$ dergees
ans:both required
3. To detmine the no of rolls a wall paper has given 16 feet width and 12 feet length a. area coverd is 20 feet
b.the room has no windows
don't know
4. A book shelf has some books and in that fine no of book it has
a.if 2 books $r$ removed it gives a total of 12
b.if 4 books are added it gives a total of 17 like that
some questins $r$ given regarding geomentry totoal questions $r 20$ and we have to complete it in 10 min A comprehension is given but I can't remember that But I provide some information regarding that] It is Water resources have been not sufficient ..this is due to over erosion or over using of irrigation or the water has

Submit your resume to cvs@123eng.com
www.123eng.com Engineering the Engineers

Chat with other engineers at www.123eng.com/forum
Visit www.123eng.com for Engineering projects
For More Placement Papers visit www.123eng.com
been occupies by some wate materils..the passge is regarding that..i think $u$ got the idea so please read the questions so that $u$ can fetch it.. each question carries 5marks and negative of 2.5 marks Arthmetic question answer from the last on wards that last questions $r$ very

Easy..

1. $2 m+n=10, n=5 w h a t$ is $m$
2. if $x, y$ positives and $x / y<1$ then
like that he has given some questions.. u can do it ..but come from last question..not from the first one's..they $r$ very tough and $r$ nothing but profit and loss, and averge, pecentge and so on.. In analytical reasoning Two passages $r$ given in that I can provide onlyone
3. To obtain a government post int eh republic of malbar you must.... Hey this u can find the pargraph from 391page AnlyticAbility of GRE BARRONS BOOK Of 13th editon..the

Answers for this $r$
1.c
2.e
3.d
4.a
plz verift that book thoroughly..no need to look other also... some sentences in that pargraph r like that..ie.ruling party or a personal associate of president Zamir..party members seeking govt post must either give a s substantial donation of golden bullian..it goes on like that..
2. a project cosolodate of large unvesity and a small college is set up.it is agred that the representatives working small committees of three with two representayives from large university.it was also agreed that no comitee be represented by faculty members of the same subject area.the large university was represented by following professors J who teach English,K who tech maths,Lwho teach natural science..the small college appointed $m$ who teach maths and $n$ who teach latinand O and P teach

Submit your resume to cvs@123eng.com www.123eng.com Engineering the Engineers

## English

1. which following represets a comitee ans: $k$, In
2. which seve $P$
k and I
3. which must be true
a.if J seves on P,P must be assigned to committee
b.if J not seve on comitee then $M$ cannot be assigne dto comitee
c.if J seve on a comitee then L must seve on that comitee ans: b and c
4. If L is not available for sevice which must be on comitee ans: n and o
5. Which must be true
a.n and or always on same comitee
b.m and o never seve on same comitee
c.when $m$ seves, Lmust seve ans:b and c

## Logical resoning

1. In 1978 thomas published"essay on population" in which he postulated that food
supply can never keep pace...
1.which of the following statements if true would tend weaken thomas argument?
1.the total population of human has risen at rapid rate because of removal of natural checks on population.
2.in many nations the increse i humann population has forstriped' Hey u find
also in one model papers given in gre baron 13th edition or any ger book In
this he has given two questions the first one answer is mostly cl think and the second one answer is A ie wars..verify this also from barren ok..
2. If Ealnine is on srteing committee then she is on the central committee.tjis stemnt can be logically deduced from which the following statements?

Ans: everyone who is on steering committee is also on central committee.
3. Frank must be a football player.he is wering a football jesy.

Ans: only football players wear jerseys.

## Comparisons

1. $13 / 1414 / 15$ u have to compare and write it
2. 10 power 11-10power 10 and 10 power 10
3. given circimference of a circle is 4 pie and for other circle ihe has given the diameter.he asked to compare the radius of both circles..
4. He ahs given a strigth line with points $x z y$ on that such that compare $x z$ and xy
here we wiil think that $x y$ is greater
5. He has given a triangle such that $A B=B C=C A$ and he has drawn a straight line from
$A$ a\such that the line be AD now we have to compare BD and CD here we have
say information is not sufficient since here he didn't give any information regarding that line..so we cant say whether it dives the segment $B C$ into two equal halves
6. $1 / 2 * 2 / 3 * 3 / 4 * 4 / 51 / 2+2 / 3+3 / 4+4 / 5$
7. Some squareroot problems he has given can't remember here the questions $r$ very
easy but see that they should be answered very carefully... I think $u$ got this..he
hs given 20 questions ans $u$ have to answer it in 5 min

## CMC PAPER ON 27th APRIL AT HYDERABAD

Campus interview at Scient inst of technology
Appeared around- 95
Cleared written- 5
1st---- Technical section, different for each Branch.
50 questions - 30 mins., there was negative marking.
Myself being from ECE branch
Some of the questions i remember are:

1. Which of the Following is platform independent?
a)UNIX
b)BASIC
c)C d) JAVA
2.Encription and Decription of data is done in which layer
a) presentation b) application c) session d).......
3.TCP-UDP layer corresponds to which layer in the OSI model

4Stack is Implemented by
a)RAm
b)ROM
c)EPROM
d)EEPROM

5 When does an amplifier act as an oscillator
options were something like $A ß<1, A ß>1, A ß=1$
6. A question on peak inverse ratio

7A couple of questions on UNIX commands, 8command for checking file system in UNIX
a)diskcheck
b)fschk
...
.,.
9Interrupt service routine is executed by a microprocessor when

1. as soon as interrrupt occurs
2.after completeion of the current process

10 transformer is used for coupling when load is. $\qquad$
11A JK flip flop figure was given to be identified
12A clipper circuit was given and its type was asked
13A clamper circuit
14Clock pulse is generated by
a)astable multivibrator
b)bistable
c)monostable

15A compiler detects what type of errors
a)syntax
b)......

16Top down approach is used for $\qquad$
a) coding
b)proper planning
c)to skip errors. $\qquad$
and the remaining i dont remember.

## Aptitude

100 questions-- 1 hr
1.Around 10 analogies -- basic GRE words,
2. 1 reading comprehension, - simple
3.Very simple Quant, a piece of cake for everyone.( some simple ones on triangles)
4.data sufficiency
5.quant comparition- simple
no prep required for quant
6. syllogisms

Time management is an important factor for the apt part, quite difficult to finish everything in time.

## Technical + HR

The technical + HR interview is taken together , separate persons for each.
HR, general family background, goal and interests etc.
Technical -
Any 2-3 subjects of ur interest.-- gotta be really good wid the subject to atleast do a good job. Confidence required, some were asked to xplain the points on the board.

Finally 2 got through. Quite a tough one, but is worth it.
By,
Shruthi

## CMC PAPER ON 9th MARCH AT WEST BENGAL

VENUE: HALDIA INSTITUTE OF TECHNOLOGY ,WEST BENGAL DATE:9 \& 10 MARCH,2007

HI , I M SUPRIYO MONDAL,AFINAL YEAR STUDENT OF APPLIED ELECTRONICS \& INSTRUMENTATION ENGINEERING FROM HALDIA INSTITUTE OF TECHNOLOGY,WESTBENGAL HAS BEEN SELECTED IN RENOWNED SOFTWERE COMPANY ,CMC ,A TATA ENTERPRISE ON 10 th MARCH ,2007.I M SHARING SOME EXPERIENCES OF THE WHOLE SELECTION PROCEDURE.

THE SELECTION PROCEDURE CONTAINS :

1. technical test
2.aptitude test
2. technical interview
3. hr interview

THE QUESTION PAPER (ONLY APTI PAPER,NOT THE TECHNICAL ONE)WAS
VERY COMMON \& SAME AS THE PREVIOUS PAPERS OF CMC
IN APTITUDE TEST
TOTAL 7- sections, 91 questions,total time 50 mins,this portion was quite easier than technical
20 analogys-, 1 comprehension -4 questions ,20 comparisions,20 arthematic question easy - time is 10 min , analyical reasioning 9,logical reasioning 9,data sufficiency 7 ,all are easy but time consuming,

ALL SECTIONS HAVE DIFFERENT TIME LIMITATION CANT ACCESS D PREVIOUS SECTION WHILE D TIME ALLOCATED FOR ANOTHER SECTION

## TECHNICAL TEST:

THIS TEST CONTAINED 50 MICROPROCESSOR(pin number,functions,0808.8085,8086,intrefacing),ANALOG \& DIGITAL ELECTRONICS(circuits \& flip flops),C(o/p of programs \& some simple basic questions),C++,JAVA,NETWORKING(APPROX 13 QUS,tcp/ip,osi,data transmission),COMMUNICATION
THEORY(modulation,antenna),MATHEMATICS(matrix ,determinant) etc QUESTIONS,TIME 30 MINS,EACH QUES CARRIES 1 MARKS \& 0.5 NEGATIVE MARKS,(THERE R NO NEGATIVE MARKS FOR APTITUDE SECTION)

TOTAL 67 STUDENTS FROM EIE,CSE,IT,MCA,EE,EIE,ECE DEPT - ONLY 16 WERE QUALIFIED IN THE TECHNICAL \& APTI test CMC's TECHNICAL TEST IS QUITE HARDER TO CRACK THAN OTHER SOFTWERE COMPANYS,CAUSE IT CONTAINS QUES FRM VARIOUS DEPARTMENTAL \& ALSO NON DEPARTMENTAL SUBJECTS ,IF U R NOT BOUNDED BY ONLY DEPT SUBJECTS THEN U CAN CRACK IT EASILY

Submit your resume to cvs@123eng.com www.123eng.com Engineering the Engineers

TEST TYPE: OBJECTIVE TYPES MULTIPLE CHOICES EXAM Analogy---20 QUS,10 MINS(FROM R.S.AGARWAL \& BARRONS GRE) LIKE THESE...

1. Alarm:trigger::trap:spring
2. scales:justice::torch:liberty
3. witch:coven::actor:troupe

SOME DATA SUFFICIENCY QUESTIONS WERE LIKE THESE.

1. The number is two digit number-- a. by adding we get $5, \mathrm{~b}$. by subtractin we get 2 ans:both a,b required
2. Given a quadrilateralABCD determine whweter it is rectangle
a. $A B=C D$
b. angle $B=90$ dergees
ans:both required
3.SOME QUESTIONS ABOUT AREAS
3. .SOME QUESTIONS ABOUT NUMBER OF BOOKS

SOME QUESTINS R GIVEN REGARDING GEOMENTRY FROM10TH 12 TH
STANDERD,MAINLY FRM TRIANGLE \& SIMPLE CALCULATION TOTOAL QUESTIONS R 20 AND WE HAVE TO COMPLETE IT IN 10MIN, @@@ A COMPREHENSION WAS GIVEN .EACH QUESTION CARRIES 1

## MARKS

1. $2 \mathrm{~m}+\mathrm{n}=10, \mathrm{n}=5$ what is m
2. if $x, y$ positives and $x / y<1$ then
hat he has given some questions..u can do it ..but come from last question..not from the first one’s..they r very tough and r nothing but profit and loss,and averge,pecentge and so on.. In analytical reasoning Two passages r given in that I can provide onlyone

Anlytic Ability of GRE BARRONS BOOK Of 13th editon..the English: COMMON TYPE OF ENGLISH CONTAINING ANALOGY,FINDING SOME WORDS FROM GOVEN TEXT ETC.

## Logical reasoning

ALL FROM THE BOOK OF BARONS \& R.S. AGARWALs
Comparisons
\#. 10 power 11-10power 10 and 10 power 10
\#. He ahs given a strigth line with points x z y on that such that compare xz and xy here we wiil think that $x y$ is greater
\#He has given a triangle such that $\mathrm{AB}=\mathrm{BC}=\mathrm{CA}$ and he has drawn a straight line from A alsuch that the line be AD now we have to compare BD and CD here we have say information is not sufficient since here he didn't give any information regarding that line..so we cant say whether it dives the segment BC into two equal halves
$\# 1 / 2 * 2 / 3 * 3 / 4 * 4 / 51 / 2+2 / 3+3 / 4+4 / 5$ This type of questions

Submit your resume to cvs@123eng.com www.123eng.com Engineering the Engineers

Chat with other engineers at www.123eng.com/forum
Visit www.123eng.com for Engineering projects
For More Placement Papers visit www.123eng.com
\#Some squareroot problems he has given can't remember here the questions r very easy but see that they should be answered very carefully... I think u got this..he hs given 20 questions ans u have to answer it in 5min \# given circimference of a circle is 4pie and for other circle ihe has given the diameter.he asked to compare the radius of both circles..

Test Consists of two sections.
Section-1(non-Technical)
Number of Questions: 91
Time Duration : 1 hour
Part-1: It consists of 20 verbal questions.
E.g. Waterfall: Cascade:

Part-2: In this a passage has given and 4 questions.
Passage has given on private sector management and labor policies. Questions are mainly based on the conclusions that can be drawn from the passage.
Part-3: 20 arithmetic questions (easy to solve)
Part-4: 20 Basic Mathematics questions taken from 9th, 10th and intermediate standard.
Mainly on Triangle properties and simples calculations. (Easy to solve)
For all the 20 questions: Two expressions are given in the left and right sides.
Your answer is
A, if Left hand side value is bigger
$B$, if right hand side value is bigger
C, if both are equal
D, if both are not equal
E, if it is not possible to conclude the relation YOU HAVE TO BE CAREFUL WHILE SOLVING THIS PART

Part-5: 7 questions on data sufficiency.
Part-6: 9 questions on Analytical reasoning.
This questions is based on relations between persons of a family.

## THERE WERE A PROBLEM RELATED TO CITYs TEMPERATURE.I CANT

TOTALLY REMEMBER BUT IT WAS THIS TYPE ..A certain city is served by subway lines $A, B$ and $C$ and numbers 12 and 3 . When it snows , morning service on $B$ is delayed. When it rains or snows , service on A, 2 and 3 are delayed both in the morning and afternoon When temp. falls below 30 degrees Fahrenheit afternoon service is cancelled in either the A line or the 3 line, but not both. When the temperature rises over 90 degrees Fahrenheit, the afternoon service is cancelled in either the line $C$ or the 3 line but not both
On Jan 10th, with the temperature at 15-degree Fahrenheit, it snows all day. On how many lines will service be affected, including both morning and afternoon?
(A) 2 (B) 3 (C) 4 (D) 5

On Jan 10th, with the temperature at 15-degree Fahrenheit, it snows all day. On how many lines will service be affected, including both morning and afternoon?

Submit your resume to cvs@123eng.com www.123eng.com Engineering the Engineers

For More Placement Papers visit www.123eng.com
(A) 2 (B) 3 (C) 4 (D) 5

On Aug 15th with the temperature at 97 degrees Fahrenheit it begins to rain at 1 PM.
What is the minimum number of lines on which service will be affected?
(A) 2 (B) 3 (C) 4 (D) 5

On which of the following occasions would service be on the greatest number of lines disrupted.
(A) A snowy afternoon with the temperature at 45-degree Fahrenheit
(B) A snowy morning with the temperature at 45 degree Fahrenheit
(C) A rainy afternoon with the temperature at 45 degree Fahrenheit
(D) A rainy afternoon with the temperature at 95 degree Fahrenheit This is only a sample paper. We are not providing you with all the questions - just some questions to give you a general idea of the test pattern.
Analytical Reasoning Section:
Directions for questions 1-5: The questions are based on the information given in a paragraph.
Directions for questions 6-9: The questions are based on the information given below @. There are 5 red shoes, 4 green shoes. If one draw randomly a shoe what is the probability of getting a red shoe
Ans 5c1/ 9c1
@. What is the selling price of a car? If the cost of the car is Rs. 60 and a profit of $10 \%$ over selling price is earned
Ans: Rs 66/-
@ $1 / 3$ of girls, $1 / 2$ of boys go to canteen. What factor and total number of classmates go to canteen.
Ans: Cannot be determined.
@. The price of a product is reduced by $30 \%$. By what percentage should it be increased to make it $100 \%$
Ans: 42.857\%
@. There is a square of side 6 cm . A circle is inscribed inside the square. Find the ratio of the area of circle to square.
Ans. 11/14
@. There are two candles of equal lengths and of different thickness. The thicker one lasts of six hours. The thinner 2 hours less than the thicker one. Ramesh lights the two candles at the same time. When he went to bed he saw the thicker one is twice the length of the thinner one. How long ago did Ramesh light the two candles .

Ans: 3 hours.
@. If $M / N=6 / 5$,then $3 M+2 N=$ ?
@. If $p / q=5 / 4$, then $2 p+q=$ ?
@. If PQRST is a parallelogram what it the ratio of triangle PQS \& parallelogram PQRST.
Ans: 1:2
@. The cost of an item is Rs 12.60 . If the profit is $10 \%$ over selling price what is the selling price?
Ans: Rs 13.86/-
@. There are 6 red shoes \& 4 green shoes. If two of red shoes are drawn what is the probability of getting red shoes
Ans: 6c2/10c2
@. To 15 lts of water containing $20 \%$ alcohol, we add 5 lts of pure water. What is \% alcohol.
Ans : 15\%
@. A worker is paid Rs.20/- for a full days work. He works $1,1 / 3,2 / 3,1 / 8.3 / 4$ days in a week. What is the total amount paid for that worker ?
Ans: 57.50
@. If the value of $x$ lies between $0 \& 1$ which of the following is the largest?
(a) $x$
(b) $x 2$
(c) $-x$
(d) $1 / x$

Data Sufficiency Section was like this:
Directions: For questions in this section mark
(a) If condition (i) alone is sufficient
(b) If condition (ii) alone is sufficient
(c) If both conditions together are sufficient
(d) If condition (i) alone \& (ii) alone are sufficient
(e) information not sufficient
@. A man 6 feet tall is standing near a light on the top of a pole What is the length of the shadow cast by the man.
(i) The pole is 18 feet high
(ii) The man is 12 feet from the pole

Ans: (c)
@. Two pipes A and B emptied into a reservoir, pipe A can fill the reservoir in 30 minutes by itself. How long it will take for pipe A and pipe B together to fill up the reservoir.
(i) By itself, pipe B can fill up the reservoir in 20 minutes
(ii) Pipe B has a larger cross-sectional area than pipe A

Ans: (a)
@. K is an integer. Is K is divisible by 12
(i) K is divisible by 4
(ii) K is divisible by 3

Ans: (c)
@. What is the distance from A to B

## For More Placement Papers visit www.123eng.com

(i) A is 15 miles from C
(2) $C$ is 25 miles from $B$

Ans: (e)
@. Is the figure ABCD is a rectangle if
(i) angle ABC=90(degrees)
(ii) $\mathrm{AB}=\mathrm{CD}$
@. Find $x+2 y$
(i). $x+y=10$
(ii). $2 x+4 y=20$

Ans: (b)
@. Is angle BAC is a right angle
(i) $\mathrm{AB}=2 \mathrm{BC}$
(2) $\mathrm{BC}=1.5 \mathrm{AC}$

Ans: (e)
@. Is x greater than y
(i) $x=2 k$
(ii) $k=2 y$

Ans: (e)
@. A piece of string 6 feet long is cut into three smaller pieces. How long is the longest of the three pieces?
(i). Two pieces are the same length.
(ii) One piece is 3 feet 2 inches lone

Ans: (b)
@. How many rolls of wall paper are necessary to cover the walls of a room whose floor and ceiling are rectangles 12 feet wide and 15 feet long
(i) A roll of paper covers 20 sq feet
(ii) There are no windows in the walls

Ans: (e)
@. $x$ and $y$ are integers that are both less than 10 . Is $x>y$ ?
(i). $x$ is a multiple of 3
(ii). y is a multiple of 2

Ans: (e)
@. Fifty students have signed up for atleast one of the courses GERMAN \& ENGLISH, how many of the 50 students are taking GERMANI but not ENGLISH?
(i). 16 students are taking GERMANI \& ENGLISH
(ii). The number of students taking ENGLISH but not GERMANI is the same as the number of students taking GERMAN
Ans: (c)
@. How much card board will it take to make a rectangular box with a lid whose base has length 7 inches.
(i). The width of the box 5 inches
(ii). The height of the box will be 4 inches

Submit your resume to cvs@123eng.com
www.123eng.com Engineering the Engineers

Ans: (c)
.@. Did ABC company made profit in 1980?
(i) ABC company made a profit in 1979.
(ii) ABC company made a profit in 1981.

Ans: (e)
@. How much is Janes salary?
(i). Janes salary is 70\% of John's salary
(ii). Johns salary is $50 \%$ of Mary's salary

Ans: (e)
@. Is $x>1$
(i) $x+y=2$
(ii) $y<0$

Ans: (c)
@. How many of the numbers, x and y are positive? Both x and y are less than 20.
(i) $x$ is less than 5
(ii) $x+y=24$

Ans: (b)
@. Is the angle ACB is right angle
(1) $\mathrm{AC}=\mathrm{CB}$
(2). (AC) $2+\mathrm{CB} 2=\mathrm{AB} 2$

Ans: (b)
@. How far it from town A to town B? Town C is 12 miles east of town A
(i). Town C is south of town B
(ii). It is 9 miles from town $B$ to town $C$

Ans: (c)
@. A rectangular field is 40 yards long. Find the area of the field.
(i). A fence around the boundary of the field is 140 yards long
(ii). The field is more than 20 yards width

Ans: (a)
@. An industrial plant produces bottles. In 1961 the number of bottles produced by the plant was twice the number of produced in 1960. How many bottles were produced altogether in the year 1960, 61,\&62
(i). In 1962 the number of bottles produced was 3 times the number of produced in 1980
(ii). In 1963 the number of bottles produced was one half the total produced in the years 1960,1961,1962.
Ans: (e)
@. Is $\mathrm{xy}>1$ ? If $\mathrm{x} \& \mathrm{y}$ are both positive
(i) $x$ is less than 1
(ii) $y$ is greater than 1

Ans: (e)
@. Is it a Rhombus
(i) All four sides are equal
(ii) Total internal angle is 360

Ans: (e)
@. How many books are in the book shelf
(i) The book shelf is 12 feet long
(ii). The average weight of each book is 1.2 pound

Ans: (e)
@. What is the area of the circle?
(i) Radius $r$ is given
(ii) Perimeter is 3 times the area

Ans: (a)
Arithmetic Section:
@. If the total distance of a journey is 120 km .If one goes by 60 kmph and comes back at 40kmph what is the average speed during the journey?
Ans: 48kmph
@. A school has $30 \%$ students from Maharashtra .Out of these $20 \%$ are Bombey students.
Find the total percentage of Bombay ?
Ans: 6\%
@. An equilateral triangle of sides 3 inch each is given. How many equilateral triangles of side 1 inch can be formed from it?
Ans: 9
@. If $A / B=3 / 5$, then $15 A=$ ?
Ans: 9B
@. Each side of a rectangle is increased by $100 \%$.By what percentage does the area increase?
Ans: 300\%
@. Perimeter of the back wheel = 9 feet, front wheel $=7$ feet on a certain distance, the front wheel gets 10 revolutions more than the back wheel. What is the distance?
Ans : 315 feet.
@. Perimeter of front wheel $=30$, back wheel $=20$. If front wheel revolves 240 times.
How many revolutions will the back wheel take?
Ans: 360 times
@. $20 \%$ of a 6 litre solution and $60 \%$ of 4 litre solution are mixed. What percentage of the mixture of solution
Ans: 36\%
@. City A's population is 68000, decreasing at a rate of 80 people per year. City B having population 42000 is increasing at a rate of 120 people per year. In how many years both the cities will have same population?
Ans: 130 years
@. Two cars are 15 kms apart. One is turning at a speed of 50 kmph and the other at 40kmph. How much time will it take for the two cars to meet?
Ans: $3 / 2$ hours
@. A person wants to buy 3 paise and 5 paise stamps costing exactly one rupee. If he buys which of the following number of stamps he won't able to buy 3 paise stamps.
Ans: 9
@. There are 12 boys and 15 girls, How many different dancing groups can be formed with 2 boys and 3 girls.
@. Which of the following fractions is less than $1 / 3$
(a) $22 / 62$
(b) $15 / 46$
(c) $2 / 3$
(d) 1

Ans: (b)
@. There are two circles, one circle is inscribed and another circle is circumscribed over a square. What is the ratio of area of inner to outer circle?
Ans: 1:2

## TECHNICAL INTERVIEW:

The technical interview was a tough one.It was two is to one interview.The main questions were-
How u prepared for this interview?-I said that just hearing my name in the qualified students in apti test I came here without any kind of preparation.
Which one ur favourite subject?U mentioned two subjects in ur CV-INDUSTRIAL INSTRUMENTATION \& COMPUTER COMMUNICATION \& NETWORKING which are different in nature. Why u choose these subjects?-I told that as per the softwere companies $r$ in less frequent in campussing for final year students so I have to make a skill in our departmental subject \& I m also preparing for offcampussing interviews.

What are your future plans?
Why did you opt for CMC?
What is your standing in your class?
Where u wanted to b posted?=====I have answered "I can go anywhere, wherethere is OXYGEN"....they were stunned listened it and appreciate this.I am realy thankful to our respected Head of the Department Mr.Debdutta Ghosh,for this patent answer.. If you are given a chance to choose higher studies and job, which would you prefer and why?
There r so many computer \& IT engineers, why we select an instrumentation engineer?
What u know about C?
Define structure \& array..
what in internet?what r the differences between intranet \& internet?
What is SCADA?
How are hub, bridge, switch and router different?
When to use the above devices specifically
What are different network topologies
what is RS-232?
What is a Switch?
What is a Router?
What is a Bridge?
Which is more expensive - router or a switch? And why?
What r the differences between TCP-IP \& OSI model?
\& some puzzles ....

## HR INTERVIEW:

HR interview was two is one also.....the questions were.
Which r u prefer ,MBA or MTECH?why?
What r ur future plans?
Say something about u...
Your family ?
Aim in life?
Say something about your hobby coin collection.....when u have started this?
As per your point of view r u suitable for our company? Why?
What will b your contribution for CMC?
R u want to share something with us in CMC?
THANK U ,NICE TO MEET U, HAVE A NICE DAY.....


[^0]:    * What is first normalisation?
    * Design a layout for storing the names of people and different modes of communicating with them
    * What are the benefits of Objected Oriented Technologies?

