

## **Selection Process:**

The company conducts recruitment process every year to select new candidates. The selection process of the company consists of 4 rounds. These rounds are as follows:

- Written Exam & Essay Writing
- Group Discussion
- Technical Interview
- HR Interview

### **Pattern of Written Exam:**

Sections	No .of Questions	Time Allotted (in mins)
Aptitude	20	100
General English	20	
Reasoning	20	
Technical	40	15-20
Essay Writing	1	

The total time allotted to the written exam is 100 minutes. After aptitude test essay writing is conducted. Time limit for essay writing is generally 15 – 20 mins.

- **Aptitude** section consists of questions based on data interpretation, graphs, blood relations, statement reasoning, etc. Also, There are questions from basic mathematics like time, speed & distance, algebra, arithmetic, probability, geometry, permutation & combination, etc. Further, there are questions from English language like grammar usage, fill in the blanks, etc.
- **General English** section consists of questions based on reading passages , sentence, completion , synonyms ,Antonyms and Sentence Completion.
- **Technical** section covers questions from the topics such as C, C++, Java, DBMS, and OS.

1. the ratio of the length : breadth :height of cuboid is 5:4:3 the volume of 7500 what will be the surface area of the bar.
2. What would be the missing number in the series: 1, 20, 266, 675?
3. 12, 51, 34 ,95,?

4. A train which is 150m. long passes a platform of 200 m in 15 sec. What is the speed of the train?  
 A) 36 km/hr  
 B) 64 km/hr  
 C) 84 km/hr  
 D) 91 km/hr
5. An accurate clock show 8 o' clock in the morning. The hour hand then rotates by 90o. The time in the clock is:  
 A) 9 o'clock  
 B) 10 o' clock  
 C) 11 o'clock  
 D) 12 o'clock
6. A person bought 110 glass bowls at a rate of Rs. 10 per bowl. He sold 100 of them at Rs. 14 and the remaining broke. What is the percentage gain for A?  
 A) 40  
 B)  $300/11$   
 C)  $243/7$   
 D)  $279/11$
7. if 6 coins are tossed simultaneously what is the probability of getting atleast four heads

find the number

if  $1 = 2$

$2 = 10$

$3 = 30$

$4 = 68$

$5 = ?$

In how many ways can you distribute 6 prizes among 5 children if every child must get atleast one?

a men walked 30m west 5m south 10m west 35m north to tollgate find the distance from the start gate?

Find sum of series:  $1 + 0.1 + 0.01 + 0.001 + \dots$

Two commodities have cost per kg is 4.75Rs & 3.20Rs were mixed in a certain ratio so as to make cost price of mixture as 17.75 Rs. Find the ratio

Three liquids were mixed in 5:4:1 ratios. If cost per kg for ach of them is 4.50, 3.75 & 5.10. Then in what price mixture should be sold to get 25% profit?

If a tap could fill entire tank in 18 hrs due to leakage, then in how much time tank can be emptied by leakage if tap can fill entire tank in 12 hrs without leakage

If no of employees are reduced by ratio  $x:y$  & their wages are increased by ratio  $p:q$ . then find the ratio to which their wages bill decreases

Find the probability in a group of 10 students sitting in a row, two of them always sit next to each other

Find the probability that a five digit no formed by 1,2,3,4,5 (not repeated) are divisible by 4

In an interview, the probability of appointing Husband is  $\frac{1}{5}$  while that of wife is  $\frac{1}{4}$ . Find probability that only one of them get selected in interview.

Speed of boat in still water is 9km/h. If boat moves upstream A to B in 2 hrs. & B to A in 1 hrs. Then find distance b/w A & B

Find avg of all nos. which lies b/w 1 and 100 & is divisible by 7

In the series 0, 3, 8, 15, \_\_\_ What is the next number? Ans : 24

9)  $X < 0$ ,  $Y < 0$  then which of the following is always positive? Ans.  $(x + y)^2$

10) Let  $ax^2 + bx + c = 0$ . If the sum of the equal roots is equal to the product of the same roots. Then which of the following hold true Ans.  $b+c = 0$

11) Find the value of  $(1.99)^2$  Ans. 3.9601

12) There is a room with 6' x 8'. A 1' tile is fixed along the 4 walls in one row. How many 1" tiles require to finish the work. Ans. 24

13) 2 persons can finish a job in 8 days. First person alone can finish the work in 24 days. How many days does the second person take to finish the job? Ans. 12 days

14) In a car wheel, two spokes cover 15 degree. Then for the entire car, how many spokes are there? Ans. 48.

15) What is the angle of degree suspended when two hands of clock showing the time 2.30. Ans. 105 degrees

16) A person's salary is getting reduced by 20%. What percentage should be added to get back his original salary? Ans. 25%

17) Two persons start at the same point, walk in opposite directions with 5km/hr and 5.5km/hr respectively.

18)What is the distance separated after 2 and half hrs? Ans. 26.25

19)A person starts walking at a speed of 5km/hr through half the distance, rest of the distance he covers with aspeed 4km/hr. Total time of travel is 9 hours. What is the maximum distance he can cover?

Ans. 40km.

20)In a rectangle the length is increased by of the original length . By what proportion should the width be reduced so that the area will be the same? Ans33

21)If a square is formed by the diagonal of the square as an edge, what is the ratio between the area ? Ans. 2

22)The perimeter of a rhombus is 52 units. One of its diagonal is 24 units.What is its second diagonals length?Ans. 10

23)A cubical rectangular bar has the dimensions with the ratio 5 : 4 : 3. Its volume is 7500. What is the surface area of the bar?Ans. 2350

24)3 persons started placementpapers with a capital of Rs.3000 . B invest Rs.600 less than A, C invest Rs.300 less than B. Then what is the share amount of B in a profit of Rs.886 ? Ans: Rs. 265.8

Directions for questions 1-10: Expand the following terms

HTML

Ans. Hyper Text Markup Language

RISC

Ans. Reduced Instruction Set Computing

ASCII

Ans. American Standard Code For Information Interchange

ANSI

Ans. American National Standard Institute.

XML

Ans. Extended Markup Language

FLOPS

Ans. Floating Point Operating Per Second

SQL

Ans. Sequential Query Language

QBE

Ans. Query By Example

ALE

Ans. Address Latch Enable

What is lagging in DBMS ?

Ans. Reduced Redundancy.

Directions 12 to 20: For the following questions find the odd man out

Unix

OS/2

CMOS

MSDOS

Ans. CMOS

Oracle

Informix

Sybase

LISP

Ans. LISP

Laser

Inkjet

Dotmatirx

Mouse

Ans. Mouse

Dir

Cls

Csh

Copy

Ans. Csh

Bit

Byte

Nibble

Digit

Ans. Digit

Hard Disk

Floppy Drive

CD ROM

Cache

Ans. Cache

SQL

QUEL

QBE

ORACLE

Ans. Oracle

C++

JAVA

VC++

PASCAL

Ans. PASCAL

Projection Operation

Selection Operation

Intersection

Set Difference Operation

Ans. Intersection

Which of the following is a universal gate ?

(a) OR

(b) AND

(c) XOR

(d) NOR

Ans. NOR

The default back end of the VB is

(a) Oracle

(b) Sybase

(c) Informics

Ans. Sybase

What is meant by Superconductivity?

Ans. No resistance

Viscosity

Ans. Friction

What is the Lock Based Protocol used for?

Ans. Concurrency Control in DBMS

Directions for question 25 to 32: Convert the decimal numbers on the left to the required form

9's complement of 28

Ans. 71

Binary of 58

Ans. 111010

Octal of 359

Ans. 547

Hexadecimal of 650

Ans. 28A

BCD of 18

Ans. 0001 1000

BCD of 34.8

Ans. 0011 0100.1000

Excess-3 code of 6

Ans. 1001

Excess-3 code of 9

Ans. 1100

If  $Ax + By = 1F16$ ;  $Cx + Dy = 2510$ . Find the value of  $x$  and  $y$

Semaphore is used for

- (a) synchronization
- (b) dead-lock avoidance
- (c) box
- (d) none

Ans. a

For addressing 1 MB memory, the number of address lines required,

- (a) 11
- (b) 16
- (c) 22
- (d) 24

Ans. b

Which of the following remains in memory temporarily

- (a) Resident portion of COMMAND.COM
- (b) Transient portion of COMMAND.COM
- (c) API
- (d) Disk BIOS

Ans. b

Pick the odd man out

- (a) IO.SYS
- (b) MSDOS.SYS
- (c) ROM-BIOS
- (d) COMMAND.COM

Ans. c

OS/2 is a

- (a) Single User OS
- (b) Multi User OS
- (c) Multi Tasking OS
- (d) None of these

Ans. c

Bootstrap loader program is a program belonging to

- (a) ROM startup software
- (b) ROM extension software
- (c) ROM BIOS software
- (d) ROM Basic software

Ans. a

The entry of starting cluster of a file is present in

- (a) Boot Parameters
- (b) Directory
- (c) FAT
- (d) Partition Table and master boot program

Ans. c

APTITUDE SECTION

Directions for questions 1-6: Find the correct meaning of the following phrases

A man of letters

A man of straw

To be in the air

To bite the dust

Man of few words

Penny wise pound foolish

Find the remainder when 333666777888999 divided by 3 or 9 or 11 ?

Which is the biggest perfect square amongst the following

15129, 12348, 23716, 20736

The greatest area of the following

(a) The radius of circle is 4

(b) The square of diagonal is 4

(c) The square of side is 4

The area of the maximum size of the circle described from the 10 square inch square?

In the series 0, 3, 8, 15,\_\_\_ What is the next number?

$X < 0$ ,  $Y < 0$  then what is the possibility that the result is always positive?

Ans. xy

3 red and 4 blue balls are in a basket. A member of PPTeam is drawing balls from the basket. What is the probability of getting the 3 red balls simultaneously?

Let  $ax^2 + bx + c = 0$

If the sum of the equal roots is equal to the product of the same roots. Then which of the following hold true

(a)  $a + b = 0$

(b)  $a = 0$

(c)  $c = 0$

(d)  $a + c = 0$

A gold density is 19 times greater than the water and for copper it is 9 times. At what ratio you can mix gold and copper to get 15 times denser than water.

Ans. 3 : 2

Find the value of  $(1.99)^2$

Ans. 3.9601

There is a room with 6' x 8'. A 1' tile is fixed along the 4 walls in one row. How many 1" tiles require to finish the work.

Ans. 24

2 persons can finish a job in 8 days. First person alone can finish the work in 24 days. How many days does the second person take to finish the job?

Ans. 12 days

A 4" cube is painted in all its faces and then it is cut down into 1" blocks. How many 1" blocks are there even without a single face being painted?

Ans. 8



A cylinder is inserted in a sphere  $d/h = 2/3$ . Find the surface area of the cylinder ?

In a car wheel, two spokes cover 15 degree. Then for the entire car, how many spokes are there?  
Ans. 24.

What is the angle of degree suspended when two hands of clock showing the time 2.30.  
Ans. 105 degrees

The age difference between two brothers is 3 years. After 6 years the ratio between the age is 9:8. What are their ages?  
Ans. 21 and 18

A person's salary is getting reduced by 20%. What percentage should be added to get back his original salary?  
Ans. 25%

Two persons start at the same point, walk in opposite directions with 5km/hr and 5.5km/hr respectively. What is the distance separated after 2 and half hrs?  
Ans. 26.25 (approx)

A person starts walking at a speed of 5km/hr through half the distance, rest of the distance he covers with a speed 4km/hr. Total time of travel is 9 hours. What is the maximum distance he can cover?  
Ans. 40km.

Initially two cups of same volume are present with milk filled upto  $3/5$ th and  $4/5$ th of their volumes. Water is then filled. Then two mixtures are mixed. Find the ratio of water to milk in the mixture.  
Ans. 3 : 7

16 grams of radioactive material decays into 8 grams in 10 years. How long will it take to decay to 1 gram ?  
Ans. 70 yrs.

In a rectangle the length is increased by of the original length . By what proportion should the width be reduced so that the area will be the same?  
Ans.  $3/4$

Find the nth number in the series is 1, -3, 5, -7, \_\_\_\_  
Ans.  $(-1)^n(2n-1)$

If a square is formed by the diagonal of the square as an edge, what is the ratio between the area?  
Ans. 2

The perimeter of a rhombus is 52 units. One of its diagonal is 24 units. What is its second diagonal's length?  
Ans. 10

A cubical rectangular bar has the dimensions with the ratio 5 : 4 : 3. Its volume is 7500. What is the surface area of the bar?  
Ans. 2350

In a class total 34 students, 16 have a brother, 15 have sisters, 9 students don't have either brothers or sisters. Find the number of students having both brother and sisters.

Ans. 6

A batsman scored 18 runs in his 18th innings and that makes his average 18. Find his average upto the 17th innings?

Ans. 19

6 women can do 75 units of work in 8 days by working 5hrs/day. In how many days can 4 women do 30 units of work by working 8hrs/day ?

A persons salary is decreased by steps of 20%, 15% and 10%. What will be the percentage decrease, if the salary is decreased in a single shot?

The ratio of the length : breadth : height of a cuboid is 5 : 4: 3, and the volume is 7500. What will be its surface area ?

If the circumference of a circle is 100 units, Then what will the length of the arc described by an angle of 20 degree ?

3 persons started placementpapers with a capital of Rs.3000 . B invest Rs.600 less than A, C invest Rs.300 less than B. Then what is the share amount of B in a profit of Rs.886 ?

Directions for 41-50: Which of the following is the correct spelling for the word  
supercede and supersede  
recommend and reccomend  
superintendent and superitendant  
separate and seperate  
succeed and suceed  
coolly and cooly  
despair and dispair  
ridiculous and rediculous  
indispensible and indpensable  
tranquility or tranquillity

#### C TEST

Directions: For the given sample program give the output of the program(30 marks)

```
main()
{
int a[]={ 2,4,6,8,10 };
int i;
change(a,5);
for( i = 0; i <= 4; i++)
printf("\n %d",a[i]);
}
change( int *b, int n){
int i;
for( i = 0; i < n; i++)
*(b+i) = *(b+i) + 5;
}
```

1)Find the remainder when 333666777888999 divided by 3 or 9 or 11 ? (2 Questions like this)

2)Which is the biggest perfect square amongst the following?  
15129, 12348, 23716, 20736

Ans:23716

3)The area of the maximum size of the circle described from the 10 inch square?

4) In the series 0, 3, 8, 15,\_\_\_ What is the next number?

Ans:24

5)  $X < 0$ ,  $Y > 0$  then what is the possibility that the result is always positive?

Ans.  $(x + y)^2$

6) 3 red and 4 blue balls are in a basket. A member of PP Team is drawing balls from the basket. What is the probability of getting the 3 red balls simultaneously?

7) Let  $ax^2 + bx + c = 0$

If the sum of the equal roots is equal to the product of the same roots. Then which of the following hold true

(a)  $a + b = 0$

(b)  $a = 0$

(c)  $c = 0$

(d)  $b + c = 0$

8) Find the value of  $(1.99)^2$

Ans:3.9601

9)There is a room with 6' x 8'. A 1' tile is fixed along the 4 walls in one row. How many 1" tiles require to finish the work.

Ans. 24 (Question with different value asked).

10) 2 persons can finish a job in 8 days. First person alone can finish the work in 24 days. How many days does the second person take to finish the job?

Ans. 12 days

11) In a car wheel, two spokes cover 15 degree. Then for the entire car,how many spokes are there?

Ans. 24.

12) What is the angle of degree suspended when two hands of clock showing the time 2.30.

Ans. 105 degrees

13)A person's salary is getting reduced by 20%. What percentage should be added to get back his original salary?

Ans. 25%

14) Two persons start at the same point, walk in opposite directions with 5km/hr and 5.5km/hr respectively. What is the distance separated after 2 and half hrs?

Ans:26.25 (approx)

15) A person starts walking at a speed of 5km/hr through half the distance, rest of the distance he covers with a speed 4km/hr. Total time of travel is 9 hours. What is the maximum distance he can cover?

Ans: 40.5km.

16) In a rectangle the length is increased by of the original length . By what proportion should the width be reduced so that the area will be the same?

Ans: 33

17) Find the nth number in the series is 1, -3, 5, -7. \_\_\_\_

Ans:  $(-1)^n(2n-1)$

18) If a square is formed by the diagonal of the square as an edge, what is the ratio between the area?

Ans: 2

19) A cubical rectangular bar has the dimensions with the ratio 5 : 4 : 3. Its volume is 7500. What is the surface area of the bar?

Ans: 2350

20) In a class total 34 students, 16 have a brother, 15 have sisters, 9 students don't have either brothers or sisters. Find the number of students having both brother and sisters.

21) A batsman scored 1 run in his 18th innings and that makes his average 18. Find his average upto the 17th innings?

Ans: 19

22) The ratio of the length : breadth : height of a cuboid is 5 : 4 : 3, and the volume is 7500. What will be its surface area ?

23) 3 persons started placement papers with a capital of Rs.3000. B invest Rs.600 less than A, C invest Rs.300 less than B. Then what is the share amount of B in a profit of Rs.886 ?

Ans: Rs.265.8

24) If 38473ABC (This was not the exact no given) is divisible by 75 what is ABC in the same order.

25) Which is the biggest perfect square amongst the following :

15129, 12348, 23716, 20736

26) In the series 0, 3, 8, 15, \_\_ What is the next number?

27)  $X < 0$ ,  $Y > 0$  then what is the possibility that the result is always positive?

Ans.  $(xy)^2$

28) Let  $ax^2 + bx + c = 0$

If the sum of the equal roots is equal to the product of the same roots. Then which of the following hold true

(a)  $a + b = 0$

(b)  $a = 0$

(c)  $c = 0$

(d)  $a + c = 0$

29) Find the value of  $(1.99)^2$

Ans. 3.9601 (don't calc - should be near to 4)

30) There is a room with 6' x 8'. A 1' tile is fixed along the 4 walls in one row. How many 1" tiles require to finish the work.

Ans. 24

31) 2 persons can finish a job in 8 days. First person alone can finish the work in 24 days. How many days does the second person take to finish the job?

Ans. 12 days

32) In a car wheel, two spokes cover 15 degree. Then for the entire car, how many spokes are there?

Ans. 24.

33) What is the angle of degree suspended when two hands of clock showing the time 2.30.

Ans. 105 degrees

34) A person's salary is getting reduced by 20%. What percentage should be added to get back his original salary?

Ans. 25%

35). Two persons start at the same point, walk in opposite directions with 5km/hr and 5.5km/hr respectively. What is the distance separated after 2 and half hrs?

Ans. 26.25 (approx)

36). A person starts walking at a speed of 5km/hr through half the distance, rest of the distance he covers with a speed 4km/hr. Total time of travel is 9 hours. What is the maximum distance he can cover?

Ans. 40km.

37). In a rectangle the length is increased by of the original length . By what proportion should the width be reduced so that the area will be the same?

Ans. 33

38). Find the nth number in the series is 1, -3, 5, -7. \_\_\_\_

Ans.  $(-1)^n(2n-1)$

39). If a square is formed by the diagonal of the square as an edge, what is the ratio between the area?

Ans. 2

40). The perimeter of a rhombus is 52 units. One of its diagonal is 24 units. What is its second diagonal's length?

Ans. 10

41). A cubical rectangular bar has the dimensions with the ratio 5 : 4 : 3. Its volume is 7500. What is the surface area of the bar?

Ans. 2350

42). A person's salary is decreased by steps of 20%, 15% and 10%. What will be the percentage decrease, if the salary is decreased in a single shot?

43). 3 persons started placement papers with a capital of Rs.3000 . B invest Rs.600 less than A, C invest Rs.300 less than B. Then what is the share amount of B in a profit of Rs.886 ?

44).  $178^2 - 22^2$

(USE  $(A+B)(A-B)$ )

45).  $f(x) = x!$   $g(x) = x^{10}$   $h(x) = 10^x$  for large values of x which is greater?

46).  $f(x) = 1/(1-x)$  find  $(f(f(f(x))))$

47).  $x + (1/x) = 2.5$  find  $x^2 + (1/x^2)$

48).  $2^{(2^n)} = 256$  find  $2^{(2n)}$

49).  $x=0$   $y=0$   $6x+7y=42$  find position(lies inside/out/on) of (4,5) in the triangle

50). 22 march 2004 is sunday which year previously did 22 jun became sunday

51). A man walked 30m west 5m south 10m west 35m north to reach tollgate find the dist from start to gate.

Ans. 50m (use pythagoras)

52). area of square = sum of areas of rect1( $41*27$ ) and rect2( $41*14$ ). find square side.

Ans. 41

53). find next in series 31,29,31,30,31,?

ans. 30 he!he!he!(they rep jan,feb,mar,.... hit your head)

Walk/Swim thro Coding

54). Input a,b

```
s=0;
```

```
c=a;
```

```
d=b;
```

```
while(d0)
```

```
{
```

```
s=s+c;
```

```
d=d-1;
```

```
}
```

Print s

for given values of a,b find the output 5questions for different values of a,b