#### January 2011 Infosys Placement Paper:-

1) If a die has 1,6 and 3,4 and 2,5 opposite each other how many such dies can be made.

2) There are three boxes , In one box Two white balls , In two box 2 black balls In three box 1 white &1 black

The lables on the boxes are not correct. Then you have to open one box and to find the colour of the balls in all boxes.

Solution: Open the box labled black& white If white balls are there then the box labled with white balls contain black balls and labled with black balls contain one black and one white ball and

viceversa

if two black ballsare there.

3) there are containing 5, 7, 14, 16, 18, 29 balls of either red or blue in colour. Some boxes contain only red balls and others contain only blue. One sales man sold one box out of them and then he says " I have the same number of red balls left out as that of blue ".

Which box is the one he solds out ?

#### Ans : total no of balls = 89 and (89-29/2 = 60/2 = 30)

and also 14 + 16 = 5 + 7 + 18 = 30

4) A chain is broken into three pieces of equal lenths containing 3 links each. It is taken to a backsmith to join into a single continuous one . How many links are to to be opened to make it ? Ans : 2.

5) when the actual time pass 1hr wall clock is 10 min behind it when 1 hr is shown by wall clock, table clock shows 10 min ahead of it when table clock shows 1 hr the alarm clock goes 5 min behind it, when alarm clock goes 1 hr wrist watch is 5 min ahead of it assuming that all clocks are correct with actual time at 12 noon what will be time shown by wrist watch after 6 hr

#### Ans---5:47:32.5

(n X 60 )50/60 X 70/60 X 55/60 X 65/60

6) complete the following
a. \$ \* \* \$ @ \* ? ?
# @ @ # # \$ ? ? some what simillar like this...but not clear.
b. 1, 3, 7, 13, 21, \_\_, 43 Ans : 31
c. 1, 3, 9, \_\_, 16900

7) A girl took part in a (some) game with many others in a circular closed circuit. After pedaling for several minutes, he found that 1/3th of the cyclists ahead of her and 3/4th of the cyclists behind him together formed the total no. of participants. How many were

participating in the race?

8) OF all pets i have, except 2 all are rabbits OF all pets i have, except 2 all are fish OF all pets i have, except 2 all are cats How many rabbits, fish and cats are there?

9) given carpenter + painter = 1100 painter + electrician = 3200 electrician + plumber = 5100 plumber + mason = 2200 mason + labour = 3000 labour + painter = 1100 find every person's cash? (i dont know the exact amount mentioned above.)

7) out of 30 questions, the three persons A,B & C answered 45 correct answers, B answered 55% of A, B and C together answered 25 % more of what A answered. Find how many answers each answered?

8) Jim, Bud and sam were rounded up by the police yesterday. because one of them was suspected of having robbed the local bank. The three suspects made the following statements under intensive questioning.Jim: I'm innocentBud: I'm innocentSam: Bud is the guilty one.If only one of the statements turned out to be true, who robbed the bank?

9) There are two containers on a table. A and B . A is half full of wine, while B, which is twice A's size, is onequarter full of wine . Both containers are filled with water and the contents are poured into a third container C. What portion of container C's mixture is wine ?

10) A wall clock loses 10 minutes every 1 hour. In 1 hour by the wall clock , a table clock gets 10 minutes ahead of it. In 1 hour by the table clock an alarm clock falls 5 minutes behind it. In 1 hour of the alarm clock, a wristwatch gets 5 minutes ahead it. At noon, all 4 timepieces were set correctly. To the nearest minutes, what time will the wrist show when the correct time is 6 p.m. on the same day ?

11) "You see," said Mrs.Murphy,"Paddy is now one and one-third times as old as he was when he took to drink, and little Jimmy, who was forty months old when paddy took to drink is now two years more than half as old as I was when Paddy took to drink , so when little Jimmy is as old as Paddy was when he took to drink.our three ages combined will amount to just one hundred years" How old is little Jimmy?

12) Both the Allens and the Smiths have two young sons under eleven. The name of the boys whose ages rounded off to the nearest year are all different are Arthur, Bert, Carl and David . Taking the ages of the boys only to the nearest year , the following staements are true

\* Arthur is three years younger than his brother

- \* Bert is the oldest
- \* Carl is half as old as one of the allen boys
- \* David is five years older than the younger smith boy
- \* the total ages of the boys in each family differ by the same amount

today as they did five years ago

How old is each boy and what is each boys family name.

13) In a certain organization there are either men eligible to serve on a eligible to serve on a newly established commitee of four. The selection of the members is not an easy matter , however for there are jealousies and attachements among the candidates which prevents a free choice of four committeemen, if you were the president of the organization could you select a committee of four satisfying all these whims?

- \* Ames will serve with anybody
- \* Brown won't serve unless Clayton serves
- \* Clayton wont serve with Evans
- \* Davis wont serve without hughes
- \* evans will serve with anybody

\* French wont serve with Davis unless Grant serves too, and wont serve with Clayton unless Davis also serves

\* Grant wont serve with both Brown and Clayton and wont serve with either Ames or Evens

\* Hughes wont serve unless either Brown or French serves and wont serve with Clayton unless Grant serves too and wont serve with both Ames and Evans

14) An artist has exactly seven paintings --- ,T,U,V,W,X,Y, and Z -- from which she must choose exactly five to be in an exhibit. Any combination is acceptable provided it meets the following conditions:

- \* If T is chosen , X cannot be chosen
- \* If U is chosen, Y must also be chosen
- \* If V is chosen, X must also be chosen

15) Which one of hte following is an aceptable combination of paintings for inclusion in the exhibit?

A. T,U,V,X,Y B. T,U,V,Y,Z C. T,W,X,Y,Z D. U,V,W,Y,Z E. U,V,W,Z,Y

16) If painting T is chosen to be among the paintings included int he exhibit which one of the following cannot be chosen to be among the paintings included in the exhibit?

A. U B. V C. W D. Y E. Z

77) Which one of the following substitutions can the artist always make without violating restrictions affecting the combination of paintings given that the painting mentioned first was not, and the painting mentioned first was not, and the painting mentioned second was, originally going to be chosen ?

- A. T replaces V
- B. U replaces Y
- C. V replaces X
- D. W replaces Y
- E. Z replaces W

18) If the artist chooses painting V to be included among the paintings in the exhibit, which one of the following must be true of that combination of paintings?

- A. T is not chosen B. Y is not chosen C. U is chosen
- D. W is chosen
- E. Z is chosen

19) Yesterday my mother asked me to buy some stamps. Stamps are available in 2 paise,7paise,10paise,15paise and 20paise denominations. For three types of stamps I was asked to buy five of each. For the other two types of stamps. I was asked to buy six of each. Unfortunately I forgot which I was supposed to buy five of and which to buy six of Luckly my mother had given me the exact money required to buy the stamps , Rs. 3.00 and the shopkeeper was able to give me the correct stamps. Which stamps did I buy?

20) Farmer Jones sold a pair of cows for Rs. 210, On one he made a profit of ten percent and on the other he lost ten percent. Altogether he made a profit of five percent. How many did each cow originally cost him?

21) Meera was playing with her brother using 55 blocks. She gets bored playing and starts arranging the blocks such that the no. of blocks in each row is one less than that in the lower row. Find how many were there in the bottom most row?

22) Rahul took part in a cycling game with many others in a circular closed circuit. After pedaling for several minutes, he found that 1/5th of the cyclists ahead of him and 5/6th of the cyclists behind him together formed the total no. of participants. How many were participating in the race?

23) Tom wants to catch a hare. He is standing 250 yards south from the hare. The hare starts moving due east. Tom, instead of moving in the northeast direction, moves in such a way that at every instant, he is goingtowards the hare. If speed of tom is one and one-third times that of the hare, find the distance each traveled before he caught the hare.

24) Two people are playing with a pair of dies. Instead of numbers, the dies have different colors on their sides. The first person wins if the same color appears on both the dies and the second person wins if the colors are different. The odds of their winning are equal. If the first

dice has 5 red sides and 1 blue side, find the color(s) on the second one.

25) A company's director said during the board meeting: "The company's income from roads will be sufficient to pay 6% of the entire stock issue, but since we are paying 7.5% interest on the preferred stock of Rs.4, 000,000 we are able to pay only 5% of the common stock". Find the value of the common stock.

26) Mr. ANYMAN left ANYTOWN by car to attend a wedding at ANYCITY. He had been driving for exactly two hours when the car got punctured. It took his driver exactly ten minutes to change the wheel. In order to play safe they covered the remaining distance at a speed of 30 mph. consequently, Mr. ANYMAN was at wedding half an- hour behind schedule. Had the car got the puncture only 30 miles later , I would have been only FIFTEEN minutes late he told the driver . How Far is ANYCITY from ANYTOWN.

### Ans: 120 miles

27) Alpha, Beta, gamma, delta and epsilon are friends and have birthdays on consecutive days though may not be in order. Gamma is as many days old to Alpha as Beta is younger to Epsilon. Delta is two days older then Epsilon. Gamma's Birthday is on Wednesday. Tell whose birthday is when.

Ans: Alpha: Friday Beta : Saturday Gamma: Wednesday Delta: Tuesday Epsilon: Thursday

28) The quarter of the time from midnight to present time added to the half of the time from the present to midnight gives the present time. What is the present time?

#### Ans: 9hrs past 36 minutes AM

29) A man is going to a wedding party. He travels for 2hrs when he gets a puncture. Changing tyres takes 10mins. The rest of the journey he travels at 30 miles/hr. He reaches 30mins behind schedule. He thinks to himself that if the puncture had occurred 30miles later, he would have been only 15mins late. Find the total distance traveled by the man

30) After world war II three departments did as follows First department gave some tanks to 2nd &3rd departments equal to

the number they are having. Then 2nd department gave some tanks to 1st & 3rd departments equal to

the number they are having. Then 3rd department gave some tanks to 2nd &1st departments equal to

the number they are having. Then each department has 24 tanks. Find the initial number of tanks of each department?

## Ans ; A-39 B-21 C-12

31) A girl 'A' told to her friend about the size and color of a snake she has seen in the beach. It is one of the colors brown/black/green and one of the sizes 35/45/55.

If it were not green or if it were not of length 35 it is 55. If it were not black or if it were not of length 45 it is 55. If it were not black or if it were not of length 35 it is 55.

a) What is the color of the snake?

b) What is the length of the snake?

# Ans: a) brown b) 55

32) A man was on his way to a marriage in a car with a constant speed. After 2 hours one of the tier is punctured and it took 10 minutes to replace it. After that they traveled with a speed of 30 miles/hr and reached the marriage 30 minutes late to the scheduled time. The driver told that they would be late by 15 minutes only if the 10 minutes was not waste. Find the distance between the two towns?

33) Three clocks where set to true time. First run with the exact time. Second slows one minute/day. Third gains one minute/day. After how many days they will show true time.

34) There were some containers of quantity 1, 3, 4, 5, 6, 12, 15, 22, 24, 38 liters. Each was filled with some liquid except one. The liquids are milk, water and oil. Quantity of each was like this. Water =  $2^*$  milk oil =  $2^*$  water. Find out which container was empty and containers filled with milk and oil.

35) Two travelers, one with 64 barrels of wine, other with 20 barrels of wine. They don't have enough money to pay duty for the same. First traveler pays 40 francs and gives his 5 barrels, Second traveler gives his 2 barrels but gets 40 francs in exchange. What's value of each barrel, and duty for each barrel?

## Ans: Value of each barrel-120 francs, Duty on each-10 francs

36) What is Ann's relation with her husband's mother's only daughter-in-law's sister's husband?

## Ans: Brother-in-law

37) Some guy holding a glass of wine in his hand looking around in the room says, "This is same as it was four years ago, how old are your two kids now?" Other guy says "Three now, Pam had one more in the meanwhile." Pam says, "If you multiply their ages, answer is 96 and if you add the ages of first two kids, addition is same as our house number." The first guy says, "You are very smart but that doesn't tell me their ages." Pam says, "It's very simple, just think." What are the ages of three kids?

## Ans: 8, 6, 2

38) A motor cyclist participant of a race says "We drove with the speed of 10 miles an hour one way, but while returning because of less traffic we drove on the same route with 15 miles per hour." What was their average speed in the whole journey?

### Ans: 12 miles per hour

39) Given following sequence, find the next term in the series:

(i) 0, 2, 4, 6, 8, 12, 12, 20, 16, \_\_\_\_ Ans: 12

(ii) 3, 6, 13, 26, 33, 66, \_\_\_\_ Ans: 53

40) Three customers want haircut and a shave. In a saloon, two barbers operate at same speed. They take quarter of an hour for the haircut and 5 mins for the shave. How quickly can they finish the haircut and shave of these three customers?

#### Ans: 30 minutes

41) A shopkeeper likes to arrange and rearrange his collection of stamps. He arranges them sometimes in pair, sometimes in bundle of three, sometimes in bundle of fours, occasionally in bundle of fives and sixes. Every time he's left with one stamp in hand after arrangement in bundles. But if he arranges in the bundle of seven, he's not left with any stamp. How many stamps does a shopkeeper have?

### Ans: 301

42) Three different types of objects in a bucket. How many times does one need to select object from the bucket to get atleast 3 objects of the same type?

## Ans: 7

43) A stamp collector has the habit to arrange or rearrange the stamps accordingly. while doing this he some times keeps the stamps in pairs, or in group of 3 or in 4 or in or in 6 and realises that in any case he is left with 1 stamp and when he arranges them in groups of 7 no stamps remain. what is the number of stamps he has?

44) amy while walkin down the street with her daughter, meets her husband's mother's only duaghter in law's sister's husband. how is the related to her?

45) there are 3 customers who wants to take a hair cut and shave. there are 2 barbers who takes one quarter of an hour for a hair cut, and 5 minutes for a shave. both the barbers want to finish off and go quickly to their homes. in what time can do it.

46) we travelled to a place at the rate of 10 miles per hour and offcourse returned the same way, but owing to less traffic at the rate of 15 miles per hour.what was our relative speed.

47) there are 3 types of apples in a box. what is the number of apples we should take so that we end up with 3 apples of one kind.

48) a).3,6,13,26,33,66, b).0, 1,2,13,6,33,12,63,20,103,

49) Each alphabet A,B.. Z is a constant.A=1,B=2,C= $3^2$ ,D= $4^9$  n so on.Each letter is assigned a value -the position of that letter raised to the value of preceding alphabet.(C = 3

^B,D= 4 ^ C n so on) Compute the numerical value of (X-A)(X-B)(X-C)....(X-Y)(X-Z).

50) Mr. T has a wrong weighing pan.One arm is lengthier than other.1 kilogram on left balances 8 melons on right.1 kilogram on right balances 2 melons on left.If all melons are equal in weight, what is the weight of a single melon?

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