



TCS Fresher Job Interview Paper Pattern : 2011

Company Name: TCS

Type: Fresher, Job Interview

Hi Friends,

These questions are asked in exam.

1: There is a toy train that can make 10 musical sounds. It makes 2 musical sounds after being defective. What is the probability that same musical sound would be produced 5 times consecutively? (1 of _____) ?

Answer: $1/2 * 1/2 * 1/2 * 1/2 * 1/2 = 1/32$

32 will be the answer.

2: Peter and Paul are two friends. The sum of their ages is 35 years. Peter is twice as old as Paul was when Peter was as old as Paul is now. What is the present age of Peter?

Answer: 20 years.

3: The ages of two friends is in the ratio 6:5. The sum of their ages is 66. After how many years will the ages be in the ratio 8:7?

Answer: 12 years.

4: (There was a long story, I'll cut short it). There are 5 materials to make a perfume: Lilac, Balsalmic, Lemon, Woody and Mimosaic. To make a perfume that is in demand the following conditions are to be followed: Lilac and Balsalmic go together. Woody and Mimosaic go together, Woody and Balsalmic never go together. Lemon can be added with any material. (Actually they had also mentioned how much amount of one can be added with how much quantity of the other; but that's not needed for the question.) All of the following combinations are possible to make a perfume EXCEPT:

1) Balsalmic and Lilac

2) Woody and Lemon

3) Mimosaic and Woody

4) Mimosaic and Lilac

Answer: Mimosaic and Lilac.

5: A girl has to make pizza with different toppings. There are 8 different toppings. In how many ways can she make pizzas with 2 different toppings.

Answer: $8 * 7 = 56$

6: A triangle is made from a rope. The sides of the triangle are 25 cm, 11 cm and 31 cm. What will be the area of the square made from the same rope?

Answer: 280.5625

7: What is the distance between the z-intercept from the x-intercept in the equation $ax+by+cz+d=0$. (I do not remember the values of a,b,c,d)

8: An athlete decides to run the same distance in 1/4th less time that she usually took. By how much percent will she have to increase her average speed?

Answer: 33.33%

9: A horse chases a pony 3 hours after the pony runs. Horse takes 4 hours to reach the pony. If the average speed of the horse is 35 kmph, what s the average speed of the pony?

10: There is 7 friends (A1,A2,A3....A7).If A1 have to have shake with all with out repeat. How many hand shakes possible?

11: There are two pipes A and B. If A filled 10 liters in a hour B can fills 20 liters in same time. Likewise B can fill 10, 20, 40, 80,160....if B filled in (1/16)th of a tank in 3 hours, how much time will it take to fill completely?

Answer: 7 hours

12: (Keywords): Sports readers,10 tables,4chairs per table, each table has different number of people then how many tables will left without at least one person?

Ans: 6

13: The ages of two friends is in the ratio 5:6. After how many years will the ages be in the ratio 7:8?

Answer: 10 years.

14: What is the distance of the z-intercept from the x-intercept in the equation $ax+by+cz+d=0$. (I do not remember the values of a,b,c,d)

15: An athlete decides to run the same distance in 1/4th less time that she usually took. By how much percent will she have to increase her average speed?

Answer: 33.33%

16. A man whose age is 45 yrs has 3 sons named John, jill, jack. He went to a park weekly twice. he loves his sons very much. On a certain day he find # shop kippers sailing different things. An apple cost 1penny, 2chocolate costs 1penny.& 3 bananas cost 1 penny. He has bought equal no. of apple, chocolate & banana for each son. If the total amount he invest is 7 penny then how many he has bought from each piece for his son?

a)1app,1cho,1 banana

b)1 app,2cho,3 banana

c)1app,2cho,1banana

17. A scientist was researching on animal behavior in his lab. He was very interested in analyzing the behavior of bear. For some reason he travelled 1mile in north direction & reached at north pole. there he saw a bear .he then followed the bear around 1 hr with a speed of 2km/hr in east direction.After that he travelled in south direction & reached at his lab in2 hrs. Then what is the colour of the bear? I think ans is white

a) white

b) black

c) gray

d) brown

18. In a particular city there are 100 homes numbered from 1,2,3.....100. The city was build by a builder from Chennai. There was 45 shop in the town which was build by a builder from Mumbai. THE 2nd builder can build the in 1/2 time as compared to 1st builder. If the 2nd builder builds in 15 days, then how many 2's are used by the builder from Chennai in numbering the 100 homes?

a)17

b)18

c)19

d) 20

19.MR dash has 3 sons whose ages are respectively a,b,c. The grandfather has bought a cycle for the eldest son, mother has bought a bag for the youngest one which cost Rs150/. The sum of two age of the elder son & one son is 15.The difference of age of sons is 3 & 2.Then what is the age of the eldest son?

a)10.

b)11.

c) 12.

d)13

20. We all know that Arya bhatta is the greatest mathematics belongs to India . When his daughter Mayabati was in her teen age he discovered a problem. At that time the age of mayabati is a prime number,let that age is a. After some years her age becomes b. then Arya Bhatta was able to solve that problem wit the help of he daughter mayabati. If $a-b=5$ & product of a& b is 26 then what is the sum of two squares?

A)77

b) 45

c)89

d)67

21.how many 13 digit numbers are possible by using the digits 1,2,3,4,5 which are divisible by 4 if repetition of digits is allowed? Ans:5 to the power 12

22. $(40*40* 40-31*31*31)/(40*40+40*31+31*31)=?$ a smile calculation

23. $x/2y=2a$,then $2x/x-2ay=?$ (some thing like this .very easy)

24. A big Question describing a story. After that a number is given eg 2880.by what if we divide the number it will become a perfect square?

Ans:5

25. 1st a story. Then a simple ratio problem. The question was if the ratio of age of two persons is 5:6,sum of present age is 33,then in how many years the ratio of their age becomes 7:8?

a) 3

b) 4

c) 5

d)6

26. Mr behera wants to build A house for his wife. In this there are 5 rooms each having equal area. The length of each room is 4m,,breadth is 5 m. the height of the rooms are 2m. if to make a sq meter we need 17 bricks ,then how many bricks are needed to make the floor of a particular room?

27. A very big story.on Tuesday college parking place have only 4wheelers & bicycles,total no of wheels was 182,yhen what is the possible no of bicycles?

a) 20

b) 19

c) 18

d) 17

28. Simple question but big one on average age's like a,b,c weighted separately 1st a,b,c ,then a& b, then b&c ,then c&a at last abc, the last weight was 167,then what will be the avg weight of the 7 weight?

29. Arrange the jumbled letters to make a perfect word RGTEI (sth like this). Find to which category it belong? (not so easy,I was bt able 2 solve the problem .the number of the question was 34)

A) town

b) vegetable

c) animal

d) bird

30. 3 persons a,b,c were there A always says truth,B lies on Monday,tuesday.& Wednesday.but C lies on thrusday,Friday & saturday .one day A said”that B & C said to A that” B said

“yesterday way one of the days when I lies”,C said that”yesterday way one of the days when I lies too”.then which day was that?

- a Sunday
- b Thursday
- c Saturday
- d. Tuesday

31.a long story & with in it a mathematical series present like
8 6 17 14 35 30 71 _ 143.

32. One man want to build a wall the length and breadth of the wall are 20, 30 respectively. He need 35 bricks for one square centimeter then how many bricks he need?

Ans: $l \times b \times 35$ (no of bricks needed for sqcm)

33. one person had three children. he has 7 pennies. then how he can distribute the fruits among his child by following conditions.

- a) he can get one water millon for 1 penny.
- b) he can get 2 oranges for 1 penny.
- c) he can get 3 grapes for 1 penny.

Ans:2 water millon 1 orange 1 grape

34. $\frac{1}{3}$ rd of a number is more 3 than the $\frac{1}{6}$ th of a number then find the number?

Ans: 18

35. In Tnagar many buildings were under residential category. for buildings they number as 1 to 100. For shops, corporation numbered between 150 and 200 only prime numbers. how many time 6 will appear in building numbering?

Ans:

For 1 to 10 - 1 six

2 to 20 - 1 six

Similarly upto 59 we utilise six, 5 times

from 60 to 69 (including 66) - 11 times

from 70 to 100 - 3, hence ans = $5+11+3 = 19$

Ans:19.

36. one grand father has 3 grand child. eldest one age is 3 times of the youngest child age .sum of two youngest child age is more than two of eldest one age. find the eldest one age?

Ans: 15(we can easily predict from options, as we take y as 15)

37. difrence b/w two numbers is 4.and their product is 17.then find the sum of their squares?

Ans: 70 (By using $(x-y)^2=x^2+y^2-2xy$)

38. I don't remember exactly the question, one logical problem stating the color of beer?

Ans: white.

39. find category from following Jumbled letters, parakeet (answer)

Ans: bird (category)

40. which is the smallest digit when divides the 2880 gives perfect square.?

Ans: 5(we can easily predict from options, as we divides them with 2880)

41. I don't have any brothers and sisters by pointing a picture that man said that his father is my fathers .son then who is he?

Ans: his son.

42. 6 persons standing in queue with different age group, after two years their average age will be 43 and seventh person joined with them. hence the current average age has become 45. find the age of seventh person?

Solution: Here the question appear as an easy one, but carried a lot of unwanted sentences and unwanted datas (i dint mention above) in exam which may confuse u on solving technique.

So now we can compute x from above equation. ($x = 41$, $6x = 246$)

Let now we compute y, $((6x+y)/7) = 45$, as we have value of x, compute y.

Ans: 69

43. The ratio b/w the ages of two persons is 6:5 and sum of their ages is 77 then how many years later their ratio becomes 8:7?

Ans: we can easily predict from options

44. Horse started to chase dog as it relieved stable two hrs ago. And horse started to run with average speed 22km/hr, horse crossed 10 mts road and two small ponds with depth 3m, and it crossed two small street with 200 mts length. After traveling 6 hrs, 2hrs after sunset it got dog. compute the speed of dog?

Ans: As we have speed and travel time of horse, we can get distance travelled by it...

Hence $d = 22 \times 6 = 132\text{km}$.

Exactly this 132km was travelled by dog in 8 hours (as it started two hours earlier).

Hence speed of dog $= 132/8 = 16.5\text{km/hr}$

Ans: 16.5km/hr.

45..six friends go to pizza corner there r 2 types of pizzas and six different flavors r there they has to select 2 flavors from 6 flavors what's chances to select?

Ans: 6C2

46. 3, 22, 7, 45, 15, ?, 31

Solution: Here it appears simple, because it is arranged in sequence manner, but the actual question was somewhat twist mentioning fibonacci series and moreover question was in statements (no numbers).. hence first try to understand the question well.

here let group alternate terms 3, 7, 15, 31 ($3+4=7$, $7+8=15$, $15+16=31$)

Similarly for second group (22, 45, ? ($22+23=45$, $45+46=91$)) hence ans is 91.

47. cycles and 4 wheelers problem?

Ans: We can easily predict from options

48. some irrelevant data. in last two lines problem will be there. One man walks certain distance with 5 kmph and walk back the same

Ans: A

49. A and B tanks r there. 1/8th of the tank B is filled in 22Hrs. what is time to fill the tank full?

50. 5 friends went for week end party to McDonald's restaurant and there they measure their weights. some irrelevant data. final measure is 155 kg then find the average weight of 5 people?

Ans: $155/5=31$

51. 2 pots r there. 1st pot is filled with ink and 2nd pot is filled with water take 1 spoon of ink from 1st pot and pour it in 2nd pot and take 1 spoon of mixture from 2nd pot and pour it in 2nd pot then which one of following is true?

Ans: Water in 1st pot is less than the ink in 2nd pot.

52: One electronic problem? Ohm's law

Ans: $V=IR$

53. There r ten spots in library and each spot has 4 tables and ten readers are there. sorry I don't remember complete question?

Ans: None

54: lion and tiger are there lion lies on Monday, tues, wends and tiger lies on thurs, frid, sat. Lion said that today is one of those days when I lie.

Tiger said that today is one of those days when I lie too Then find today?

Ans: Thursday

55. 6 persons standing in queue with different age group, after two years their average age will be 43 and seventh person joined with them. hence the current average age has become 45. find the age of seventh person?

Solution: it is given as after 2 yr average age will be 43 so now the average is 2 yr. After addition of 7th person avg is 45 so 7th person will be $45 + (6 \times (45 - 43))$

Ans: 69

56. Horse started to chase dog as it relieved stable two hrs ago. And horse started to ran with average speed 22km/hr, horse crossed 10 mts road and two small pounds with depth 3m, and it crossed two small street with 200 mts length. After traveling 6 hrs, 2hrs after sunset it got dog. compute the speed of dog?

Ans: As we have speed and travel time of horse, we can get distance traveled by it...

Hence $d = 22 \times 6 = 132\text{km}$.

Exactly this 132km was travelled by dog in 8 hours (as it started two hours earlier).

Hence speed of dog = $132/8 = 16.5\text{km/hr}$

Ans: 16.5km/hr.

57. 3, 22, 7, 45, 15, ?, 31

Solution: Here it appear simple, because it arranged in sequence manner, but the actual question was some what twist mentioning fibonacci series and more over question was in statements (no numbers).. hence first try to understand the question well.

here let group alternate terms 3,7,15,31 ($3+4=7$, $7+8=15$, $15+16=31$)

Similarly for second group (22,45,? ($22+23=45$, $45+46=91$) hence

Ans: is 91.

58. In Tnagar many buildings were under residential category for buildings they number as 1 to 100. For shops, corporation numbered between 150 and 200 only prime numbers. how many time 6 will appear in building numbering?

Ans: this type of question if it is asked how many 2,3,4,5,6,7,8,9 then you bindly write the answer as 20. but for 1 answer will be 21 as 100 is included

59. $((4x+3y)+(5x+9y))/(5x+5y) = ?$ as $(x/2y) = 2$

Ans: as $x=2y$ put the value and get the answer.

60: If we subtract a number with y, we get 4 increase of number, once it got divided by y itself.. Find that number??

Ans: 12 (we can easily predict from options, as we take y as 6)

61. I don't remember exactly the question, one logical problem stating the colour of beer?

Ans: white. what ever the question about the color of beer means you wrote the answer as white because polar beer. this question is very lengthy don't burther about that.

62. Jumbled letters, parakeet (answer)

Ans: bird (category)

63. I am only son for my parents. (some irrelevant statements in the middle to distract u). The man in picture is my father's son. (some irrelevant statements). who is he?

64. A toy train can make 10 sounds sound changes after every 4 min.....now train is defective and can make only 2 sounds.....find probability that same sound is repeated 3 times consecutively(1 OUT OF ___)?

1.16

2.8

3.12

4.4

ANS: $(1/2) \times (1/2) \times (1/2) = (1/8)$ thus 1 out of 8

66. I have 3 grandsons.....

age diff btw 2 of grandsons X yrs

1st grandson is twice elder than younger one

addition off ages of all the three is y

then what is age of eldest grandson?? (there is some value in X and Y)

67. Ferrari is leading car manufacturer.*Ferrari S.p.A.* is an Italian sports car

It has enjoyed great success.

If Mohan's Ferrari is 3 times faster than his old MERCEDES wich gave him 35 kmph

if Mohan traveled 490 km in his Ferrari

the hw much time (hours) he took??

1.8

2.4

3.7

4.7.33

(options may be different)

68.lion rat stayin in jungle happily.....

Lion lies on : MON TUE WED

RAT lies on :WED THURS SAT

if lion says : I didnt lie yesterday

RAT says : e1 i didnt lie yesterday

so what day is today??

69. The ratio of current age of X and Y is 5:7,after hw many years der age ratio will b 7:9?

70. Inspired by Fibonacci series sanket decided to create is own series which is

1,2,3,7,7,22,15,67,....

like dish, then what no come immediately before 63?

Ans= 202

explanation ;check alternate no.1,3,7,15=>n*2+1 similarly 2,7,22,67=====>n*3+1 so series is 1,2,3,7,7,22,15,67,31,202,63.....

71. By using 1,2,3,4,5,how many 5 digit no. can be formed which is divisible by 4,repertation of no. is allowed??

Ans: last 2 place should be divisible by 4

So possible values at last place are 12,24,32,44,52 this can be arranged in 5 ways

The rest 3 places can be filled in 5*5*5 way so total is 5^4

72. The cost 1 plum is 1 cent ,2 apples is 1 cent,3 banana is 1 cent.....

if Rahul buys same amount of fruits for his 3 sons spending 7 cent den what amount of fruit each child will get??

Ans: 1 plum ,2 apple,1 banana

xplanation:7/3=2.333 cents for each child

according to ans given for d sum each child will get 1 plum ,2 apple,1 banana

73. 2880 is divided by which smallest no. so we get no. which is perfect square???

Ans: 5

explanation 2880/5=576 sure sort question.

74. There are to prime no (with some nonsense stuff)..

den addition of two prime no is 13,n multiplication is 21,den what r some of there squares?

Explanation : XY=21 and X+Y=13...solve using calci..ans of X & Y will b in points then x²+y²=??

75. Smita was makin 1 design(again some nonsense)....size of larger cube to be made is 5*5*5.....

using smaller cubes of 1*1*1....she created solid larger cube ..den she decided to make

hollow cube then how many $1 \times 1 \times 1$ cubes reqd to make hollow larger cube

Ans: 104

Explanation $(25+25)+(15+15)+(12+12)=104$

76. $2X/5Y=5X/3Y$...den wat is x/y

77. A pizza parlor provides pizzas...there were 2 toppings available initially pepperoni and salami. but now they've introduces 8 new toppings (some names) to select from.. a person wishes to buy two DIFFERENT pizzas of NEW topping....in how many ways he can do that??

Ans: $8 \times 7 = 56$

78. Person travels to....(some nonsense stuff).....if he goes from A to B with speed of 4kmph and

returns back to B with speed of 5 kmph....what is his avg. speed of journey?? (values may be different)

Ans: 4.44(its NOT 4.5)

Explanation : $2PQ/(P+Q) = 2 \times 4 \times 5 / (4+5) = 4.44 \text{ kmph}$

79. There is a dice having value from 1 ..6 on each face and a pack of cards having face cards.

(Hugh chunk of nonsense) when 2 dies are thrown and their scores are added then which sum will come max number of times??

1.8

2.9

3.10

4.11

Ans: 8

Explanation : 8----2,6 3,5 4,4

9----4,5 3,6

10----5,5 4,6

11---- 5,6

thus 8's probability is more

80. "Susha brought trillion cloth and rope to if rope is 153 mtr long and it is to be cut into pieces of 1 mtr long then how many times will she have to cut it??

Ans: 152 times

81. There are some 2 wheelers and 4 wheelers parked (some nonsense). Total number of wheels present is 240

then how many 4 wheelers were there

Ans: This can be done by looking at the option first check the no of bicycles and then multiply it by 2. And then subtract the multiplication value from 240 if the value is divided by 4 then that is the answer

82. $1/3$ of a number is 6 more than $1/6$ of that number then what is the number

Ans: $x/3 = x/6 + 6 = 36$

83. The cost of making a robot consists of material cost, repairing cost, coloring cost and is in the ratio 3:4:5.if the material cost is 1200 then find out the cost of the robot.

Ans: Simple 3 part is 1200 so $3+4+5=12$ part=?

84. There are Pepsi 1 liter & oil 1 liter .it is given as 1 spoon of Pepsi is akin and is mixed with Oil. Then 1 spoon oil&Pepsi is taken and is mixed with Pepsi then which of the condition holds true.

Ans: The amount of Pepsi in oil is more than amount of oil in Pepsi.

85. An tank is filled with water .in first hour 10 lit ,in second hour 20 lit and in 3 rd hour time 40 lit. if time taken to fill $1/4$ of the tank is 5 hr what is the time required to fill up the tank.

Ans: As the water is filled as twice speed and in 5 the hour $\frac{1}{4}$.so in 6 hour $\frac{1}{2}$.so answer 7th hour.

86. Which is the smallest no divides 2880 and gives a perfect square?

a.1 b.2 c.5 d.6

Ans: c

87. Two bowls are taken, one contains water and another contains tea one spoon of water is added to second bowl and mixed well, and a spoon of mixture is taken from second bowl and added to the second bowl. Which statement will hold good for the above?

Ans: second liquid in first bowl is smaller than the first mixture in second bowl

88. Form 8 digit numbers from by using 1, 2,3,4,5 with repetition is allowed and must be divisible by4?

a.31250 b.97656 c.78125 d.97657

Ans: c

89. Rearrange and categorize the word 'RAPETEKKA'?

Ans: bird

87. In school there are some bicycles and 4wheeler wagons one Tuesday there are 190 wheels in the campus. How many bicycles are there?

Ans: 15

88. Key words in question (Fibonacci series, infinite series, in the middle of the question one number series is there....I got the series 3 12 7 26 15 ?

Ans: 54

(Logic: $3*2+1=7$ $12*2+2=26$

$7*2+1=15$ $26*2+2=54$)

89. A lies on mon, tues, wed and speak truths on other days, B lies on thur, fri, sat and speaks truths on other days ...one day a said I lied today and B said I too lied today. What is the day?

90. Man, Bear, North, South, walks.

Ans: White

91. A father has 7 penny's with him and 1 water melon is for 1p, 2chickoos for 1p, 3 grapes foe 1p.he has three sons. How can he share the fruits equally?

Ans: 1 watermelon,2chickoos,1grape

92. $(\frac{1}{2})$ of a number is 3 times more than the $(\frac{1}{6})$ of the same number?

Ans: 9

93. There are two pipes A and B. If A filled 10 liters in hour B can fills 20 liters in same time. Likewise B can fill 10, 20, 40, 80,160....if B filled in $(\frac{1}{16})$ th of a tank in 3 hours, how much time will it take to fill completely?

Ans: 7 hours

94. KEYWORDS:T.Nagar,Chennai,1-100,prime numbers b/n 140-180,How many 2's are there?

Ans: 20 (Not only 2's ,1's,3's,4's,5's,6's,7's,8's,9's,0's also 20)

95. A man is standing before a painting of a man and he says I have no bro and sis and his father is my father's son?

Ans: he himself

96. One question has last part like difference between two terms is 9 and product of two numbers is 14, what is the squares of sum of numbers?

Ans: 109

97. What is the value of $[(3x+8Y)/(x-2Y)]$; if $x/2y=2$?

Ans:10 {the numerical may change)

98. A pizza shop made pizzas with to flavors in home there are 'N' different flavors, in that 'M' flavors are taken to made pizza. in how many ways they can arrange?

(Logic: NcM)

99. One grandfather has three grandchildren, two of their age difference is 3, eldest child age is 3 times youngest child's age and eldest child's age is two times of sum of other two children. What is the age of eldest child?

Ans:15

100. One organization ,material labor and maintenance are in the ratio of 4:6:7,the material cost is:100,what is the total cost?

Ans: 425

101. KEYWORDS: density, reluctance, sensitivity, voltage ,current, what is the resistance
Formula is "R=V/I"

102. In a market 4 man are standing .the average age of the four before 4years is 45,after some days one man is added and his age is 49.what is the average weight of all?

Ans: 49

103. KEYWORDS: Sports readers,10 tables,4chairs per table, each table has different number of people then how many tables will left without at least one person?

Ans: 6

107. KEYWORDS: Die, card, coin, b/n 2 to 12

Ans: All are equal

108. In a school for a student out of a 100 he got 74 of average for 7 subjects and he got 79 marks in 8th subject. what is the average of all the subjects?

Ans: 74.625

109. In a question ,last part has ,the ages of two people has the ratio of 6:6 and by adding the numbers we get 44,after how many years the ratio would be 8:7?

Ans: 8

110. One train travels 200m from A to B with 70 km/ph. and returns to A with 80kmph, what is the average of their speed?

111. Two years before Paul's age is 2times the Alice age and the present age of Paul is 6times the Alice. what is the presents Paul's age???(3years) "u try to solve this question once"

112. There is Ferrari and Benz car, Benz speed is say 10kmph and it cover 10 km. & if Ferrari goes with 3 times faster than Benz. So in how much time Ferrari could take to cover same distance.

Sol: as speed of Ferrari is $3 \times 10 = 30$ so time will be $10/30$

113. If one lady have 3 daughter and any of out 3 have diff. of ages is 3.And oldest is 3 times of more than 2 than youngest after 2 years then tell the age of oldest daughter.

Solution: let x is youngest ,y middle ,z oldest. so $y-x=3$, $z-y=3$, and $z=2 \times (x+2)$ and put the option answer try to get condition (sorry i forgot option but pattern will be same)

114. One question like that ,there is Fibonacci series and you have to find one number ..clue-it based on series

116. if a person moves 15km straight and turns 45km right and moves 15km straight then how much distance he needs to walk to reach starting point?

117. if there are 30 cans out of them one is poisoned if a person tastes very little he will die within 14 hours so if there are mice to test and 24 hours, how many mice's are required to find the poisoned can? .if Atlantic is found in Atlantic ocean ,India is found in indian ocean then which of the following cases are true.

118. if a and b are mixed in 3:5 ratio and b,c are mixed in 8:5 ratio if the final mixture is 35 litres, find the amount { $a/b = 3 \times 8/5 \times 8$ and $b/c = 8 \times 5/5 \times 5$ $a/b/c = 24:40:25$ **Ans:** $40 \times 35 / (24+40+35) = 1400/89 = 15.79$ }

119. $1! + 2! + \dots + 50! = 3 \times 10^{64}$?

120. 6 persons standing in queue with different age group, after two years their average age will be 43 and seventh person joined with them. hence the current average age has become 45. find the age of seventh person?

Solution: Here the question appear as an easy one, but carried a lot of unwanted sentences and unwanted datas (i dint mention above) in exam which may confuse u on solving technique.

Let x be current average age of first 6 persons in queue and current age of seventh person be y. Then 6x will become the sum of those 6 persons age.

Now, let compute the sum of those 6 persons after two years, $6x + 12$ (as each and individual increase their age by 2). hence its average become $(6x + 12)/6 = 43$ (give in question itself).

So now we can compute x from above equation. ($x = 41$, $6x = 246$)

Let now we compute y, $((6x + y)/7) = 45$, as we have value of x, compute y.

Ans: 69

121. Horse started to chase dog as it relieved stable two hrs ago. And horse started to ran with average speed 22km/hr, horse crossed 10 mts road and two small pounds with depth 3m, and it crossed two small street with 200 mts length. After traveling 6 hrs, 2hrs after sunset it got dog. compute the speed of dog?

Ans: As we have speed and travel time of horse, we can get distance traveled by it.

Hence $d = 22 \times 6 = 132\text{km}$.

Exactly this 132km was traveled by dog in 8 hours (as it started two hours earlier).

Hence speed of dog = $132/8 = 16.5\text{km/hr}$

Ans: 16.5km/hr.

122. 3, 22, 7, 45, 15, ?, 31

Solution: Here it appear simple, because it arranged in arranged in sequence manner, but the actual question was some what twist mentioning fibonacci series and more over question was in statements (no numbers).. hence first try to understand the question well.

here let group alternate terms 3, 7, 15, 31 ($3+4=7$, $7+8=15$, $15+16=31$)

Similarly for second group (22, 45, ? ($22+23=45$, $45+46=91$) hence

Ans: 91.

123. In Tnagar many buildings were under residential category. for buildings they number as 1 to 100. For shops, corporation numbered between 150 and 200 only prime numbers. how many time 6 will appear in building numbering?

Ans:

For 1 to 10 - 1 six

2 to 20 - 1 six

Similarly upto 59 we utilize six, 5 times

from 60 to 69 (including 66) - 11 times

from 70 to 100 - 3, hence ans = $5+11+3 = 19$

Ans: 19.

124. If we subtract a number with y, we get 4 increase of number, once it got divided by y itself.. Find that number??

Ans: 12 (we can easily predict from options, as we take y as 6)

125. I am only son for my parents. (some irrelevant statements in the middle to distract u).

The man in picture is my father's son. (some irrelevant statements). who is he?

Ans: he himself (blood relation type of question).

126. It is the class with the seating arrangement in 4 rows and 8 columns. When the teacher says 'start' the girl who is sitting in first row and first column will say 1, then the next girl sitting behind her will say 4, the next girl sitting behind that girl will say 7, in a particular order each girl is telling a number, the following girls told 10, 13 next turn is yours what u will say?16

127. It is dark in my bedroom and I want to get two socks of the same color from my drawer, which contains 24 red and 24 blue socks. How many socks do I have to take from the drawer to get at least two socks of the same color?

- a) 2
- b) 3
- c) 48
- d) 25 ;

Solution: 3

128. Inspired by Fibonacci series sanket decided to create is own series which is 1,2,3,7,7,22,15,67,....

like this, then what no come immediately before 63?

Ans: 202

explanation ;check alternate no.1,3,7,15=====>n*2+1

similarly 2,7,22,67=====>n*3+1 so series is 1,2,3,7,7,22,15,67,31,202,63.

129.Valentine day 14 Feb. 2005,was celebrated by n and u on Monday, he was very happy, he n she then day on 14 Feb. 2010?

130. The cost 1 plum is 1 cent ,2 apples is 1 cent,3 banana is 1 cent if rahul buys same amount of fruits for his 3 sons spending 7 cent den what amount of fruit each child will get??

Ans: 1 plum ,2 apple,1 banana

xplanation:7/3=2.333 cents for each child

according to Ans given for d sum each child will get 1 plum ,2 apple,1 banana

131. There is a dice having value frm 1 ..6 on each face and a pack of cards having face card aces

(hugh chunk of nonsense).....when 2 dies are thrown and their scores are added then which sum will come max number of times??

- 1.8
- 2.9
- 3.10
- 4.11

Ans: 8

explanation : 8----2,6 3,5 4,4

9----4,5 3,6

10----5,5 4,6

11---- 5,6

thus 8's probability is more

132."susha brought terilon cloth and rope to if rope is 153 mtr long and it is to be cut into pieces of 1 mtr long then how many times will she have to cut it??"

Ans: 152 times

133. (dnt remember the exact q but procedure was something like this) 8th year--1/1024,, 9th year--1/512,, 10th year--1/256 then afr hw many years 1/32???

Ans: 13

134. There are 2 cans A and B one of MILK and other of Water resp. , both of same qty first one teaspoon of milk from A can was added to B can then one teaspoon from B can was added to A can then which of the following is true..

1.Can A contain more milk than water in can B

2.Can A contain less milk than water in can B

3.both contain same qty of milk and water

Ans: option--2

135. If a pipe can fill the tank within 6 hrs but due to leak it took 30 min more now if the tank was full hw much time will it take to get emptied through the leak ??

136. Avg wt of class is X kg (some number) after adding wt of the teacher avgas wt of class becomes Y kg then what is the wt of the teacher??

137. 20 men shake hand with each other. Maximum no of handshakes w without cyclic handshakes.

138. 100 men & women dance with each other. Probability that a man cannot dance with more than two women.

139. Horse chasing a pony. Horse leaves stable after 2hrs from ponies departure. 4 hrs 2 catch pony. Find speed of pony. Given-speed of horse.

140. A man goes north 37km.turns left goes 2km.turns right goes 17km.turns right goes 2km. find distance b/w starting&ending point.

141. Lady have 2 select gloves&hat from a basket I the dark. she can distinguish hat&gloves.14red,20blue,18green r there. Find probability that any selected glove pair has same color.

142. Alice in wonderland meets a character goblet whose age is 2times Alice after 2 years age problem

143. Peter is 2times Paul's age was when Peter's age is same as Paul's present age. find Paul's age.

144. From a rope a triangle is made of sides 21cm,24cm,28cm. from this a square is made. Find area of square.

145. In a supermarket average of 4people standing in queue taken 2yrs before is 55yrs. Now a person of 45 yrs is added current age.

146. A toy can produce 10diiff sounds. New toy is defective to produce 2 sounds in 3min. find probability that it produces 6 consecutive is 1 in()

147. $\frac{1}{6}$ th of a no is 4 times more than $\frac{2}{3}$ of a no. find

148. Age of 2 in d ratio 4:5. Total of 2 ages is 55. After 2 yrs age in ratio 5:7 ages

149. A jogger jogs@ $\frac{1}{6}$ th of his usual speed. How much % she has 2 increase 2 reach normal pace of walking.

150: X is 3 years younger to Y. X's father is a businessman who invested 10000/- at 8% rate of interest n obtained his amount after 10 years. Y's father is a job holder who invested around 20000 at 2% rate n obtained his amount after 20 years. Now Compounded both of them get around ABC rs/-(don't remember) After 5 years the ratio of ages of X n Y is 1:2. Now X's father is 20 years older to Y n Y' father is 30 years more than X. After 20 years again X's mother asks X's father to purchase a LCD TV which costs around 45000/- . what is the age of X n Y together?

Ans: answer lies in considering two statements 2gether i.e "X is 3 years younger to Y" n "After 5 years the ratio of ages of X n Y is 1:2"