TCS Placement Paper

1)A is driving on a highway when the police fines him for overspeeding and exceeding the limit by 10 km/hr.At the same time B is fined for overspeeding by twice the amount by which A exceeded the limit.If he was driving at 35 km/hr what is the speed limit for the road?Ans. 15 kmph

2)A car travels 12 kms with a 4/5th filled tank.How far will the car travel with 1/3 filled tank?Ans. 5 kms

3) falling height is proportional to square of the time. one object falls 64cm in 2sec than in 6sec from how much height the object will fall.

4)A car has run 10000 miles using 5 tyres interchangably,To have a equal wornout by all tyres how many miles each tyre should have run. answer 4000 miles/tyre

5)A person, who decided to go to weekened trip should not exceed 8 hours driving in a day. Average speed of forward journey is 40 m/h. Due to traffic in sundays, the return journey average speed is 30 m/h. How far he can select a picnic spot?

a) 120 miles b) between 120 and 140 miles c) 160 miles ans: 120 miles

6)A ship started from port and moving with I miles per hour and another ship started from L and moving with H miles per hour. At which place these two ships meet?

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port G H I J K L

7)A person was fined for exceeding the speed limit by 10mph. Another person

was also fined for exceeding the same speed limit by twice the same. If the

second person was traveling at a speed of 35 mph, find the speed limit.

Sol: Let 'x' be the speed limit

Person 'A' was fined for exceeding the speed limit by = 10mph

Person 'B' was fined for exceeding the speed limit by = twice of 'A' = 2*10mph=20mph

given that the second person was traveling at the speed of 35mph

=> 35mph – 20mph = 15mph

8)A bus started from bustand at 8.00am, and after 30 minutes staying

at destination, it returned back to the busstand. The destination

is 27 miles from the busstand. The speed of the bus is 18mph. In

return journey bus travels with 50% fast speed. At what time it returns to the busstand? (11.00am).

9) wind flows 160 miles in 330 min, for 80 miles how much time required.

10)A storm will move with a velocity of towards the centre in hours,At the same rate how much far will it move in hrs.(but the answer is 8/3 or 2 2/3)

11)If A is traveling at 72 km per hour on a highway. B is traveling at a speed of 25 meters per second on a highway. What is the difference in their speeds in meters per second?

(a) 1/2 m/sec (b) 1 m/sec (c) 1 1/2 m/sec (d) 2 m/sec (e) 3 m/sec

12)A traveler walks a certain distance. Had he gone half a kilometer an hour faster \, he would have walked it in 4/5 of the time, and had he gone half a Kilometer an hour slower, he would have walked 2 ½ hr longer. What is the distance?

a)10 Km b)15 Km c)20 Km d)Data Insufficient

13) A ship leaves on a long voyage. When it is 18 miles from the shore, a seaplane, whose speed is 10 times that of the ship is sent to deliver mail. How far from the shore does the seaplane catch upo with the ship?

a)24 miles b)25 miles c)22 miles d)20 miles

14) In a circular race track of length 100 m, three persons A, B and C start together. A and B start in the same direction at speeds of 10 m/s and 8 m/s respectively. While C runs in the opposite at 15 m/s. When will all the three meet for the first time on the after the start?

a)after 4s b)after 50s c)after 100s d)after 200s

15) If the distance traveled (s) in time (t) by a partile is given by the formula s = 1+ 2t+3t2+4t3 , then what is the distance travelled in the 4th second of its motion?

a)141m b)171m c)243 m d)313 m

16) A non stop bus to Amritsar overtakes an auto also moving towards Amritsar at 10 am. The bus reaches Amritsar at 12.30 pm and starts on the return journey after 1 hr. On the way back it meets the auto at 2 pm. At what time the auto will reach Amritsar?

a) 2.30pm b)3.00pm c)3.15pm d)3.30pm

TIME AND WORK

1)A is twice efficient than B. A and B can both work together to complete a work in 7 days. Then find in how many days A alone can complete the work? 10.5 (11)

2)A finish the work in 10 days. B is 60% efficient than A. So how days does B take to finish the work? Ans 100/6 (4 days)

3) A finishes the work in 10 days & B in 8 days individually. If A works for only 6 days then how many days should B work to complete A's work? Ans 3.2 days (4 days)

4)A man, a woman, and a child can do a piece of work in 6 days. Man only can do it in 24 days. Woman can do it in 16 days and in how many days child can do the same work? Ans 16

5)If 20 men take 15 days to to complete a job, in how many days can 25 men finish that work?Ans. 12 days

6) one fast typist type some matter in 2hr and another slow typist type the same matter in 3hr. if both do combinely in how much time they will finish. ans: 1hr 12min

7)A man shapes 3 cardboards in 50 minutes,how many cardboards does he shape in 5 hours?answer 18cardboards.

8)A work is done by two people in 24 min. one of them can do this work a lonely in 40 min. how much time required to do the same work for the second person.

SolA+B) can do the work in = 1/24 min.

A alone can do the same work in = 1/40 min.

B alone can do the same work in = (A+B)'s – A's = 1/24 – 1/40 = 1/60

Therefore, b can do the same work in = 60 min

9)A can do a piece of work in 20 days, which B can do in 12 days. In 9 days B does ¾ of the work. How many days will A take to finish the remaining work?

10)Anand finishes a work in 7 days, Bittu finishes the same job in 8 days and Chandu in 6 days. They take turns to finish the work. Anand on the first day, Bittu on the second and Chandu on the third day and then Anand again and so on. On which day will the work get over? a)3rd b)6th c)9th d)7th

11) 3 men finish painting a wall in 8 days. Four boys do the same job in 7 days. In how many days will 2 men and 2 boys working together paint two such walls of the same size? a) 6 6/13 days b)3 3/13 days c)9 2/5 days d) 12 12/13 days

12)The size of the bucket is N kb. The bucket fills at the rate of 0.1 kb per millisecond. A programmer sends a program to receiver. There it waits for 10 milliseconds. And response will be back to

programmer in 20 milliseconds. How much time the program takes to get a response back to the programmer, after it is sent?ans 30 milliseconds

TRAINS

1)TWO STATIONS A & B ARE 110 KM APART. ONE TRAIN STARTS FROM A AT 7

AM, AND TRAVELS TOWARDS B AT 20KMPH. ANOTHER TRAIN STARTS FROM B AT 8 AM

AND TRAVELS TOWARDS A AT 25KMPH. AT WHAT TIME WILL THEY MEET?

A. 9 AM B. 10 AM C. 11 AM D. 10.30 AM

TREE

1) 900 M WIDE 3000 M WIDTH SOMETHING I CAN'T REMEMBER SOME VALUES ARE GIVEN BY AIR PER M Rs. 4 BY GROUND PER M Rs. 5

THEN WHERE U WILL CUT

2)Two trees are there. one grows at 3/5 of the other in 4 years, total growth of trees is 8 ft. what growth will smaller tree will have in 2 years (< 2 ft.) ie 1 ½ feet

TRIANGLES

1) Given the length of the 3 sides of a triangle. Find the one that is impossible? (HINT : sum of smaller 2 sides is greater than the other one which is larger)

2)3 angles or 3 sides r given.Which will form a triangle?

UNITS

1)(Momentum*Velocity)/(Acceleration * distance) find units. ans mass

2)(energy * time * time)/(mass * dist) = distance

3)(momentum * velocity)/(force * time) = velocity

4)Find the physical quantity in units from the equation:

(Force*Distance)/(Velocity*Velocity) Ans. Ns2/m

5)Find the physical quantity represented by MOMENTUM *VELOCITY] / [LENGTH * ACCELERATION]?

VENN DIAGRAM

1)Venn Diagram kinda ques.Some know English, some French,some German......how many know two languages.....

2)VENN DIAGROM below

1. HOW MANY PERSON KNOW ENGLISH MORE THAN FRENCH

2. HOW MUCH % OF PEOPLE KNOWS ALL THE 3 LANGUAGES

3. HOW MUCH % OF PEOPLE THOSE WHO KNOWS FRENCH AND GERMAN AND NOT ENGLISH

FRENCH

3)Consider the following diagram for answering the following

questions:

A. Find the difference between people playing cricket and tennis alone. Ans: 4

B. Find the percentage of people playing hockey to that playing both hockey and cricket.

C. Find the percentage of people playing all the games to the total number of players. Ans: 6%

4)1. How many more or less speak English than French?

2. What % people speak all the three languages?

3. What % people speak German but not English?

WEIGHTS

1)There are 150 weights .Some are 1 kg weights and some are 2 kg weights. The sum of the weights is 260.What is the number of 1kg weights?Ans. 40

2)A truck contains 150 small packages, some weighing 1 kg each and some weighing 2 kg each. how many packages weighing 2 kg each are in the truck if the total weight of all the packages is 264 kg?

(a) 36 (b) 52 (c) 88 (d) 124 (e) 114