#TCS NQT Numerical Aptitude Previous Year Questions

Previous Year PART- 1

Q1. A man has to travel 50 km in two hours. He could cover 20 km in one hour, and then had to

stop for 10 minutes for refueling. By what factor should be increase his speed with reference to

that during the first hour so as to be able to complete the journey as per schedule?

A. 1.2

B. 1.8

C. 2.4

D. 1.5

Answer: Option B

Q2. If n is an integer such that 1nn352 is a six-digit number exactly divisible by 24, what will be

the sum of the possible values of n?

A. 15

B. 27

C. 9

D. 21

Answer: Option A

Q3. The diameter of a pizza is 30 cm. What is the area (in square cm) of the upper surface of a

sector of the pizza whose arc length is 8 cm?

A. 120 * pi

B. 60

C. 60 * pi

D. 120

Answer: Option B

Q4. What is the mean proportional (MP) between the MPs of (2/7 & 32/343) and (2 & 1/5000)?

A. 3/35

B. 4/35

C. 2/35

D. 2/175

Answer: Option C

Q5. If (x+10)% of 240 is 60% more than x% of 180, then 15% of (x+20) is what percent less

than 25% of x?

A. 16

B. 15

C. 15 ½

D. 19 1

/21

Answer: Option A

Q6. A sum of Rs.30000 invested in a scheme where the interest gets compounded annually and

grows to Rs. 51840 in three years. How much interest (in Rs.) would have got accrued in six

months in the same scheme had the interest been compounded quarterly?

A. 3024

B. 3075

C. 3126

D. 2975

Answer: Option B

Q7. How much percentage is (0.025% of 240% of 1.5) of 0.9?

A. 0.01

B. 10

C. 0.1

D. 1

Answer: Option C

Q8. If the positive square root of ((90^0.5)+(80^0.5) is multiplied by (2^0.5 - 1), and the product

is raised to the power of four, the result would be:

A. 1600

B. 11520000

C. 100

D. 10

Answer: Option D

Q9. What is the mean deviation of the data: 8,9,12,15,16,20,24,30,32,34?

A. 8

B. 10.2

C. 0

D. 9.2

Answer: Option A

Q10. An item was sold at a profit of 12% after giving a discount of 12.5% on the List Price. What

would be the gain or loss percentage if a discount of 25% is given on the List Price?

A. 2.5% loss

B. 2.5% gain

C. 4% gain

D. 4% loss

Answer: Option D

Q11. What is the diameter in cm of a solid right circular cylinder whose height is 6 cm and the

area of the curved surface is five times the combined area of the two flat surfaces?

A. 3

B. 2.4

C. 1.2

D. 0.9

Answer: Option B

Q13.The Variation in temperature throughout the day in a desert town was studied on the basis

of the records of the maximum and minimum temperatures which was 36 and 8 degree

centigrade respectively. What was the standard deviation in degree centigrade?

A. 28

B. 22

C. 14

D. 12

Answer: Option A

Q14. The Collection of numbers which comprise the data given below is arranged in ascending

order. (3,7,9,N - 1,15,18,19,20). If the median of the data is 12.5, what is the value of N?

A. 11

B. 12

C. 11.5

D. 10.5

Answer: Option A

Q15.A file of cadets consisting of ten rows and five columns measures 420m in length along

the direction of their marching. How much time(in hours and minutes) would it take to march for

a stretch of 3 km, if the stride of the each cadet is 80cm and he takes 57 strides per minute?

A. 1 hr 15 min

B. 1 hr 24 min

C. 1hr 10 min

D. 1 hr 20 min

Answer: Option A

Q16. 96 men were engaged for a project of constructing a railway track of the length of 18km in

four weeks. After one week it was observed that the work of 4km was completed. How many

additional men should be engaged for timely completion of the project?

A. 12

B. 16

C. 14

D. 15

Answer: Option B

Q17. X is four times as efficient as Y in respect of doing a particular work. Working together

they complete the work in 16 days.In how many days Y, working alone,will be able to do half the

work?

A.40

B.80

C.60

D.20

Answer: Option A

Q18. In a competitive exam, 5 marks are awarded for every correct answer and for every wrong

answer, 2 marks are deducted. Sathwik and 32 marks in this examination. If 4 marks has been

awarded for each correct answer and 1 mark had been deducted for each incorrect answer,

Sathwik would have scored 34 marks. If Sathwik attempted all the questions, how many

questions were there in the test?

A. 20

B. 14

C. 12

D. 26

Answer: Option D

Q19. A sum invested on simple interest grows to Rs 22500 and Rs 25500 in seven and nine

years respectively. What is the rate percentage of the interest?

A. 7.5

B. 9.6

C. 13.5

D. 12.5

Answer: Option D

Q20. What is the sum (in Rs) which, when divided among X, Y, Z in the proportion 3 : 5 : 7

provided Rs. 8000 more to Z than what it would have done to him when the proportion is 11 : 15

: 19?

A. 120000

B. 180000

C. 135000

D. 175000

Answer: Option B

Q21. What is the value of (0.0000128)1

/7?

A. 0.2

B. 5

C. 2

D. 0.5

Answer: Option B

Q22. After purchasing two copies of the same book, X sold them respectively at 0.8 and 1.4

times their cost prices. What was the percentage gain earned or loss incurred by X?

A. 5% gain

B. 10% gain

C. 5% loss

D. 10% loss

Answer: Option B

Q23. Two vessels X and Y of capacities one and two litres respectively are completely filled with

mixtures of two chemicals A and B. The ratio by volume of the chemicals A and B in X and Y

are 3:2 and 4:5 respectively. The contents of A and B are mixed and the combination is kept in

a vessel C of capacity of four litres. How many litres of Chemical A should be added to the

combination so as to make the ratio of A to B equal to 1:1?

A. 1/135

B. 1/67

C. 1/68

D. 1/270

Answer: Option C

Previous Year Questions PART-2

Q1. What is the value of 1.59 X 1.59 + 8.46 X 0.53 + 9 X 0.47 X 0.47 ?

A. 9.025

B. 6.25

C. 9

D. 4

Answer: Option C

Q2. For a grouped frequency distribution having eight classes, the upper class boundaries of the

lowest and the highest classes are 10 and 66 respectively. What is the lower class boundary of

the highest class?

A. 57

B. 60

C. 58

D. 59

Answer: Option B

Q3. What is the simplified value of: (72 + 242

) / [202

-

1

2

(522

- 1) + 10{(0.3)2 + (0.1)2

} - 2 x 7]2?

A. 1/5

B. 1/225

C. 1/125

D. 1/25

Answer: Option B

Q4. If √7+ √5

√7 − √5

= $a - b$√35 ,then the value a - 2b is

A. 4

B. 5

C. 8

D. 7

Answer: Option C

Q5. Four men and two women can do a piece of work together in one day. If a woman is twice

as efficient as a man, in how many days can a woman working alone do the work?

A. 4

B. 6

C. 8

D. 2

Answer: Option A

Q7. The median of the following data is _____.

Class 0-10 10-20 20-30 30-40 40-50

Frequency 10 15 12 15 8

A. 24.266

B. 24.266

C. 24.123

D. 24.166

Answer: Option D

Q8. Raju buys 3 goats and 2 sheeps for Rs.11600. When he sells the goats at 20% profit and the

sheep at 10% loss, he earns a total profit of Rs.1000. The cost of one sheep is _____.

A. Rs.2600

B. Rs.4600

C. Rs.2400

D. Rs.2200

Answer: Option D

Q9. A train starting from station X was to arrive at station Y at 6:06 PM. It could travel at 62.5%

of its usual speed and reach Y at 7 PM. At what time did it start from X?

A. 4:44 PM

B. 4:56 PM

C. 4:36 PM

D. 4:24 PM

Answer: Option C

Q10. The sum of two numbers is 2604 and their HCF is 124. Which is the smaller between them

if their difference is the least possible?

A. 1116

B. 1240

C. 620

D. 496

Answer: Option B

Q11. In how many ways can X give Rs.500 to Y using only Rs.100 and Rs.20 notes, with the

condition that she has only 16 notes of Rs.20, and being asked to use the notes of both the

denominations?

A. 6

B. 3

C. 4

D. 2

Answer: Option C

Q12. What sum (in Rs) given on loan for two years with scheme of return on the basis of

compound interest at a yearly rate of 10% will correspond to repayment through equal monthly

installments of Rs.9075?

A. 165000

B. 180000

C. 189000

D. 198000

Answer: Option B

Q13. A sales representative's commission is 6% on all sales up to Rs. 15000 and 5% on all sales

exceeding this. He remits Rs. 47350 to his company after deducting his commission. What were

the total sales?

A. Rs. 49000

B. Rs. 47500

C. Rs. 50500

D. Rs. 50000

Answer: Option D

Q14. The capacities of three containers X, Y and Z are 1, 2 and 4 liters respectively. Initially, X is

empty, while Y and Z are full of water and milk respectively. X is filled from Y, Y is replenished

from Z and X is emptied into Z. If this process is repeated once more, then what will be the ratio

of milk in Y to water in Z?

A. 3:5

B. 1:1

C. 4:3

D. 4:5

Answer: Option B

Q15. A particular distribution is represented by two data points. If the range and the standard

deviation of the distribution are R & S respectively, what is the relation between them?

A. S = √R

B. S = 2R

C. S = R

D. S = R

2

Answer: Option D

Q16. The average score in Mathematics of a class increases by 10% if the total marks secured

by a number of students who form 20% of the class strength and whose average score is 48 is

not included in the calculation. What is the average score?

A. 90

B. 60

C. 75

D. 80

Answer: Option D

Q17. What will be the percentage increase in the area of a square, If its side is increased by

20%?

A. 44%

B. 40%

C. 36%

D. 20%

Answer: Option A

Q18. If 25% of a number is equal to the three-fifths of another number, what will be the ratio of

the first number to the second number?

A. 5:12

B. 12:5

C. 12:15

D. 15:12

Answer: Option B

Q19. The ratio is incomes of P and Q is 7:5 and the ratio of their expenditures is 4:3. IF at the

end of the year, P and Q save Rs.3000 and Rs. 2000 respectively, what is Q's income?

A. Rs.5000

B. Rs.4500

C. Rs.4000

D. Rs.7000

Answer: Option A

Q20. A hollow spherical ball of thickness 1 cm and external radius 5 cm is melted and then from

the solid so obtained, without any loss of material, 61 identical spherical balls are obtained.

What is the diameter (in cm) of each ball?

A. 1.5

B. 3

C. 1

D. 2

Answer: Option C

Q21. Raju lends Rs. 3000 to Bharath and a certain sum to Charan at the same time at 6% per

annum simple interest. If after 5 years, Raju altogether receives Rs. 1650 as the interest from

Bharath and Charan, what is the sum lent to Charan?

A. Rs. 2500

B. Rs. 2750

C. Rs. 3250

D. Rs. 3300

Answer: Option A

Previous Year Questions PART-3

Q1. A sales representative's commission is 6% on all sales up to Rs.15000 and 5% on all sales

exceeding this. He remits Rs.47350 to his company after deducting his commission. What were

the total sales?

A. Rs.50000

B. Rs.49000

C. Rs.47500

D. Rs.50500

Answer: Option A

Q2. When the List Price (LP) of an article is fixed at 30% above the Cost Price (CP), and while

selling the same, it is subject to a discount of x%, the profit percentage is 80% of that when the

LP is fixed at 25% above the CP and the discount is 16%. What is the value of x?

A. 3.6

B. 3.25

C. 3

D. 3.84

All the answer options are wrong.

Correct Answer: 20

Q3. The ratio of the average speeds of two sprinters A and B is 8:7. In a racing track if B starts at

a distance 2m ahead of A, at what distance (in metre) from the starting point of B would A

catch up with B?

A. 2.8

B. 1.5

C. 0.4

D. 4.4

All the answer options are wrong.

Correct answer: 14

Q4. A sum invested in compound interest (CI) at a certain rate for three years earns the same

interest as it would earn by way of an investment in simple interest (SI) at the rate of 18.2% for

four years. How much more or less is the percentage rate in case of the CI than that in the case

of the SI?

A. 21.25

B. 18.43

C. 16.52

D. 20.63

All the answer options are wrong.

Correct answer: +1.8%

Q5. With symbols having their usual meanings the mean of the data given below is 39.2.

x 36 40 35 44

f 10 13 12

What is the missing frequency?

A. 125.2

B. 124.6

C. 124.2

D. 123.8

All the answer options are wrong.

Correct answer: 15

Q6. What is the fourth proportional of the mean proportionals between (4, 6.25); (0.0027, 300);

(1.2 X 10-3, 3)?

A. 4.8

B. 48

C. 36

D. 3.6

All the answer options are wrong.

Correct answer: 43.92

Q7. What is the mean Deviation from the median for the data given below?

Data: 34, 46, 28, 48

A. 64

B. 53

C. 66

D. 51

All the answer options are wrong.

Correct answer: 8

Q8. In a competitive exam, 5 marks are awarded for every correct answer and for every wrong

answer, 2 marks are deducted. Sathwik and 32 marks in this examination. If 4 marks has been

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Answer: Option D

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annum simple interest. If after 5 years, Raju altogether receives Rs. 1650 as the interest from

Bharath and Charan, what is the sum lent to Charan?

A. Rs. 2500

B. Rs. 2750

C. Rs. 3250

D. Rs. 3300

Answer: Option A

Q10. What is the difference between the Range and the Standard Deviation of all the natural

numbers between 81 and 90, both inclusive?

A. 7

B. 11

C. 9

D. 8

All the answer options are wrong.

Correct answer: 7.13

Q12. The area of a sector, with central angle 150

, of a circle is 231 sq cm. If Π = 22/7, what is the

circumference (in cm) of the circle?

A. 2.8

B. 1.45

C. 2.1

D. 2.45

All the answer options are wrong.

Correct answer: 264

Q13. The total surface area of a solid hemisphere is 75 times the area of a circle whose

diameter is 6 cm. What is the radius (in cm) of the hemisphere?

A. 80π

B. 120π

C. 100π

D. 50π

All the answer options are wrong.

Correct Answer: 15

Q14. A takes 10 days less than B to complete a work, and together they do it in 12 days. In how

many days can B alone do the work?

A. 9

B. 12

C. 10

D. 6

All the answer options are wrong.

Correct Answer: 30 days

Q15. A shopkeeper calculated his profit as 12% with the selling price of an article as the

base.What would have been his actual profit percentage if the selling price was 20% more?

A. 20

B. 24

C. 23

D. 21

All the answer options are wrong.

Correct Answer: 36.66%

Q16. The sum of ages of two friends is 74. After one year the ratio of their ages will be 9:10.

What was the ratio of their ages nine years ago?

A. 4:3

B. 3:2

C. 13:12

D. 7:6

All the answer options are wrong.

Correct Answer: 13:15

Q17. The table below presents the data of atmospheric pressure (in area of mercury) at a place

at four different times of the day during four days P, Q, R, S. A steady rise in atmospheric

pressure indicates a fair weather. On which of the given days was the weather fair?

Time/Day A B C D

0600 742 765 754 761

1000 778 767 755 770

1400 762 745 757 775

1800 760 756 758 774

2200 768 752 760 762

A. 324:283

B. 81:73

C. 326:293

D. 28:25

All the answer options are wrong.

Correct answer: C

(Also please note that Days are marked as P, Q, R, S in the question but in the options it is given

as A, B, C, D)

Q18.In case of frequency distribution for ten continuous classes, the class width is 4 and the

lower class limit of the lowest class is 8. What is the upper class limit for the highest class?

A. Both R&S

B. R Only

C. Neither R nor S

D. S only

All the answer options are wrong.

Correct Answer: 48

Q20. 10 men can complete a work in 8 days and 10 women take 12 days to complete the same

work. How many days will 3 men and 6 women take to complete the same work?

A. 1137

B. 937

C. 1037

D. 1237

Answer: Option A

Q21. A retailer purchases several pens of same cost for Rs.384 and then sells some of them for

Rs.114 at no loss or gain. What is the least possible number of pens that he will be left with?

A. 9

B. 7

C. 8

D. 3

All the answer options are wrong.

Correct answer: 45

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