CAT 2023

25 MUST DO QUANT

With Video Solution

PART-2

Prepared By
TEAM AzuCATion

Prepared For
Competitive Exams

AZUCATION

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QUESTIONS

Q. 1) In a circle AB is diameter of length 34 unit and BC is chord of length 16 unit. If CD is perpendicular on AB such that D lies on AB then what is the length AD.

a. 350/17 b. 453/56 c. 450/17 d. NoT

Q. 2) If A takes "16" hours more than time taken to complete a work when A & B work together and B takes "4" hours more than time taken to complete a work when A & B work together. Then at what time B can do half of the work alone ?

a. 20 b. 8 c. 12 d. 6 e. NoT

Q. 3) What is the minimum value of $9sin^2x + 16cosec^2x$

Q. 4) What would be remainder if 98! Is divided by 101 ?

a. 17 b. 84 c. 50 d. 0 e. NoT

Q.5) Mohan sells out a toy at 25% profit. Had he purchased at 25% less and sold it for Rs. 25 less, then he would have still gained 25%. Find the cost price of toy

a. 100 b. 120 c. 75 d. 80 e. NoT

Q. 6) How many integral sided isosceles triangle (but not equilateral) is possible , if sum of two sides is 20

a. 30 b. 31 c. 32 d. NoT

Q. 7) (1 - cot1)(1 - cot2)(1 - cot3).....(1 - cot42)(1 - cot43)(1 - cot44) = ?

a. 22 b. 2^{22} c. 44 d.1

Q. 8) If ratio of perimeter of a rectangle and that of a square is 5:1 and ratio of one side of rectangle to one side of square is 3:2 then what is the ratio of area of square to that of rectangle.

TRY without options ☺

Q.9) If ABCDEFGHIJ are a regular polygon then what is measurement of angle EHA

a. 108 b. 36 c. 72 d. 90

Q. 10) In AB and BC are two chords of a circle, then find length of chord AC if AB=BC=6cm and radius of circle is 5cm

a. 9.6 b. 6 c. 10 d. NoT

Q.11) If O is a point inside a parallelogram ABCD such that areas of ΔABO ,ΔBCO & ΔCDO are 12 cm^2 , 15 cm^2 and 10 cm^2 then what is the area of Δ AOD.

a. 11 b. 10 c. 7 d. Cannot be determined

Q.12) How many scalene triangles are possible with sides are from {1,2,3,4,5}

No options try yourself.

Q. 13) If $\frac{x}{1-x}+\frac{y}{1-y}+\frac{z}{1-z}=4$ *then* $\frac{1}{1-x}+\frac{1}{1-y}+\frac{1}{1-z}$ =?

a. 7 b. 1 c. 0 d. NoT

Q. 14) $If\ a^2+b^2+4a+4=0\ then\ a^4-b^4=?$

a. 16 b. 0 c. 8 d. NoT

Q. 15) If A is 25% more efficient than B, who is 20% less efficient than C. If B alone takes 5 more days to complete the work than C alone. Then in which day they would complete the work if B starts the work and A & C helps him of alternate day

a. 10th Day b. 11th Day c. 12th Day d. Data inadequate

Q.16) $\sqrt[4]{7 * \sqrt[4]{7 * \sqrt[4]{7 * \sqrt[4]{7}}}} = 7^{\frac{m}{n}}$ where m & n are in simplest form then m + n = ?

No option please ☺

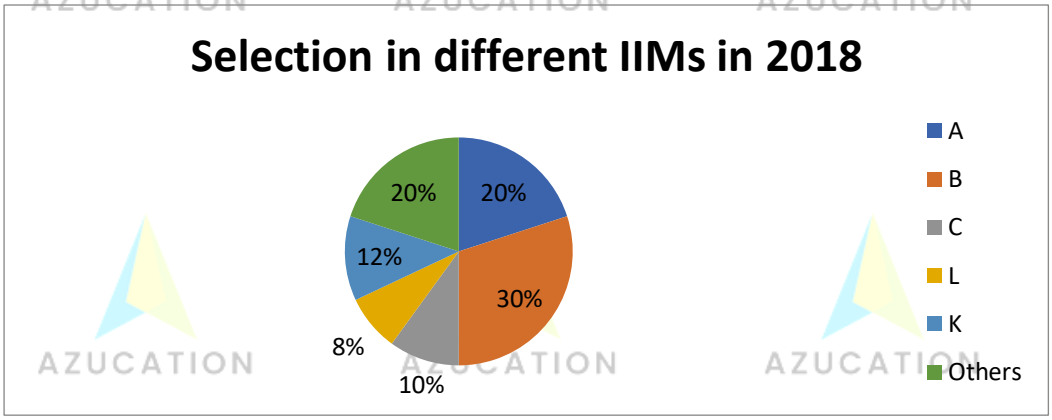
Q. 17) Find the number of trailing zeros $150! + 151! + 152! + 153!$

a. 36 b. 37 d. 38 e. NoT

Q. 18) If a - b = 5 & $a^3 - b^3 = 140$, then | a+b| = ????

a. $\sqrt{27}$ b. 5 c. $\sqrt{29}$ d. 0

Q. 19) Given pi-chart is % distribution of selection of students in different IIMs in 2018.



If in 2019 ; 12 more students join IIM-A and all rest numbers remains the same then in2019 approx. 7.77% students joins L then in 2018 how many students were joined C

a. 32 b. 38 c. 40 d. 43 e. NoT

$Q.20) \frac{6}{1} * \frac{9}{2} * \frac{12}{3} * \frac{15}{4} * \frac{18}{5} \ldots * \frac{33}{10} = x$ then what is the last two digits of x

a. 47 b. 39 c. 51 d. NoT

Q. 21)A number on being divided by 6, 8 and 10 successively leaves the remainders 5, 7 and 9 respectively. Find the remainder when the same number is divided by 120.

a. 119 b. 1 c. 117 d. NoT

Q. 22) If $X = \sqrt{7 + 3 * \sqrt{7 + 3 * \sqrt{7 + 3 * \sqrt{7 + \cdots}}}}$ &

$Y = \sqrt{7 - 3 * \sqrt{7 - 3 * \sqrt{7 - 3 * \sqrt{7 \ldots}}}}$

then X + Y = ?

Q. 23) $1333^3 + 1334^3 + 1333^3 - 3999 * 1333 * 1334$ =???

a. 3100 b. 1800 c. 7000 d. 4000 e. NoT

Q. 24) What will be the last three digits of the product

$5 * 25 * 125 * 625 * 3125 * \ldots\ldots\ldots * 5^{30}$

a. 025 b. 125 c. 225 d. 625

Q. 25) If ABCD a trapezium , in which AB||CD, CD=15 cm , AB = 3 cm & area of ΔDOC = 25 sq. cm then find the area of trapezium ABCD.

a. 64 b.36 c. 30 d. 80 e. N

VIDEO SOLUTION LINK

https://youtu.be/Pq2Z0aA46Dc

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ANSWER BOLD AND COLORED

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Ans : 25

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Ans: 4:51

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Ans : 3

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Ans : 341

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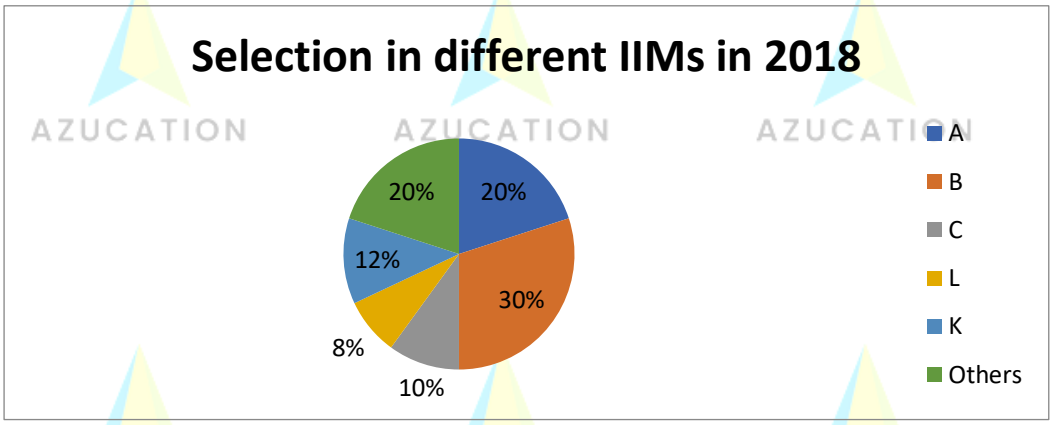

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then X + Y = ?

Ans : $\sqrt{37}$

Video Solution of Q22: https://youtu.be/O-tHQvAG_gQ

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