CLAT Community

daily QT

SECTIONAL TEST

25 DAYS TO GO FOR **CLAT 2027**

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OUR RANKERS

1 in every 4 of CLAT Community's students are now placed in Top 5 NLUs.



ALL INDIA RANK **15**

SAHER GOLE



ALL INDIA RANK **17**

PARTHIVA SUSHANTH



ALL INDIA RANK **61**

MIHIKA AGGARWAL



ALL INDIA RANK **79**

SUHIT KENDURKAR



ALL INDIA RANK **86**

RIYA CHAUHAN



ALL INDIA RANK **100**

SHEIKH EHSAAN KHALEELULLAH



ALL INDIA RANK **104**

HRISHIT PODDAR



ALL INDIA RANK **137**

ROHAN YADAV



ALL INDIA RANK **146**

TEJAS ROY



ALL INDIA RANK **147**

ANIRUDDH BAJAJ



ALL INDIA RANK **189**

KABIR WADHWANI



ALL INDIA RANK **263**

CANCHI SISTLA AKSHARA



ALL INDIA RANK **319**

SHIVAM TRIPATHI



ALL INDIA RANK **413**

HARDIK GAUTAM



ALL INDIA RANK **NLSIU**

MANYA BHASKAR



ALL INDIA RANK **NLSIU**

NAMASHRITA GOPINATH



ALL INDIA RANK **NLSIU**

RONIL DHASAL



ALL INDIA RANK **NALSAR**

VEDA RAO



ALL INDIA RANK **NLSIU**

SAMANDAR SINGH



ALL INDIA RANK **NALSAR**

GANJI HAINDAVI



ALL INDIA RANK **NALSAR**

SAHISHNA



ALL INDIA RANK **NLSIU**

PRANAV. S

AND MANY MORE.

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OUR COURSES

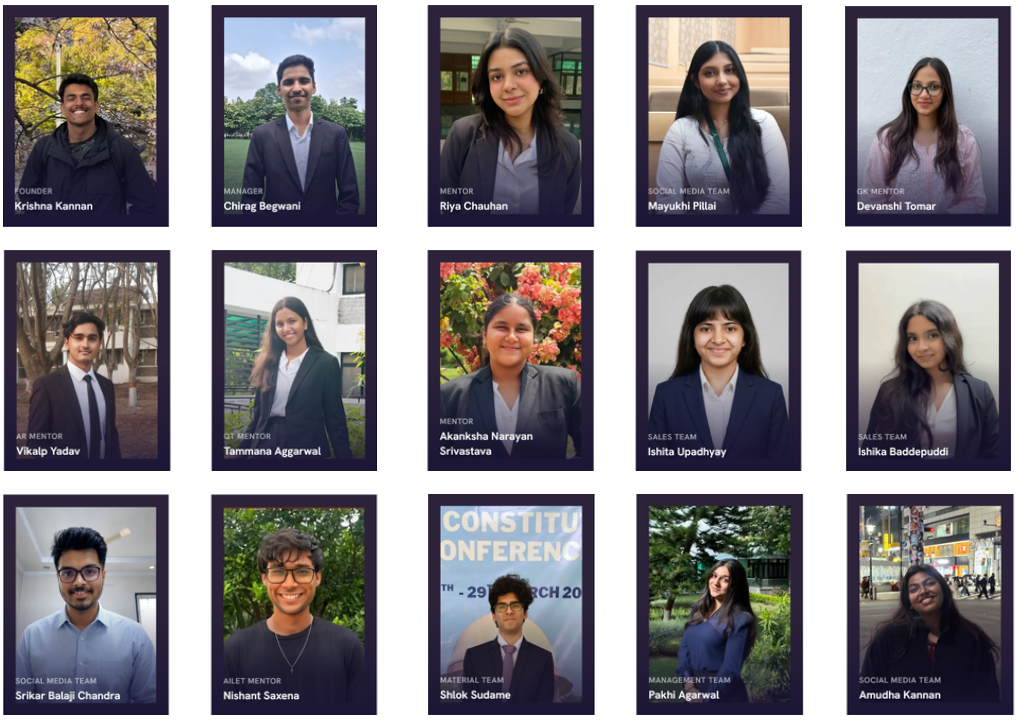








OUR MENTORS



MENTORS' NOTE

Good morning everyone,

If you're reading this, you're already doing something that thousands of CLAT aspirants never do—you've shown up today. That might sound like a small thing, but over the next few months you'll realise that success in CLAT is rarely decided by one brilliant mock or one 12-hour study session. It's decided by the hundreds of ordinary days where you choose to sit down and study even when you don't feel like it.

The entire CLAT Community team is rooting for you. Whenever you're stuck, ask doubts, discuss questions, and make use of the people around you. You don't have to prepare alone. We hope today's material helps you take one more step towards your dream.

Now stop reading this note and get to work. Your future self will thank you for the effort you put in today.

All the best.

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DAILY QT

PASSAGE 1 — ARCADIA LANDSCAPES: SECTORS, ARCS & AREAS

Arcadia Landscapes designs circular lawns divided into wedge-shaped flower beds, each bed being a sector of the lawn's circle. The firm's standard lawn has a radius of 10 metres, and every bed is cut with a central angle of 72 degrees, so that five beds fill the circle exactly. Clients ask for three figures on every design: the length of the curved edge of a bed, the area of the bed, and the total distance around the bed.

The curved edge of a sector is an arc, and its length is the fraction of the full circumference given by the central angle over 360 degrees. The area of a sector is the same fraction of the full area of the circle. The firm treats these fractions as the key to every calculation, so that a change in the central angle changes the arc and the area in the same proportion. The total distance around a bed is the arc plus the two straight radii that bound it.

Designers also reverse the calculation when a client specifies an area and asks for the radius that produces it, and they check whether a proposed bed can be fitted into a lawn of a given size. Unless stated otherwise, the lawn is perfectly circular, all beds share the same centre, and the answers should be left in terms of π, since the firm reports exact values.

1. The length of the arc of one bed, in metres, is:

(A) 2π

(B) 4π

(C) 5π

(D) 3π

2. The area of one bed, in square metres, is:

(A) 10π

(B) 25π

(C) 20π

(D) 15π

3. The ratio of the arc length of one bed to the circumference of the lawn is:

(A) 1/4

(B) 1/5

(C) 1/6

(D) 1/3

4. The area, in square metres, of a bed whose central angle is 144 degrees is:

(A) 36π

(B) 40π

(C) 48π

(D) 44π

5. The total distance around one bed, in metres, is:

(A) 20 + 4π

(B) 20 + 2π

(C) 10 + 4π

(D) 20 + 5π

6. A circular lawn of radius r is cut so that one bed has central angle 72 degrees and area 50π square metres. The value of r, in metres, is:

(A) 5√10

(B) 10

(C) 25

(D) 5√5

PASSAGE 2 — CHANCE ANALYTICS: BIRTHDAYS, MONTHS & COMPLEMENTARY COUNTING

Chance Analytics is a consultancy that studies coincidences in groups of people. A common question asks how likely it is that some members of a small group share a feature, such as a birthday or a birth month. The consultancy assumes that every date or month is equally likely for each person, and that the people are chosen independently of one another.

The consultancy's standard method is to work with the complement. Rather than computing the probability that at least two people share a feature directly, the team first computes the probability that all the people have different features, and then subtracts this from one. For a group of four people choosing among twelve months, the number of ways each person can have a distinct month is found by multiplying decreasing choices, while the total number of ways is the number of possible month assignments.

The team also checks special cases, such as the chance that every member of the group shares the same month, and the number of ways to choose a set of distinct months without regard to which person receives which month. Unless stated otherwise, every person is assigned exactly one month and one day, and each question refers to a group of four people.

7. For a group of four people with birthdays equally likely over 365 days, the probability that at least two share a birthday is closest to:

(A) 0.0164

(B) 0.0836

(C) 0.1

(D) 0.9836

8. For four people each assigned one of twelve months equally likely, the probability that all four months are different is:

(A) 55/96

(B) 41/96

(C) 1/12

(D) 5/6

9. For the same four people, the probability that at least two share a month is:

(A) 1/3

(B) 41/96

(C) 5/12

(D) 55/96

10. For the same four people, the probability that all four are born in the same month is:

(A) 1/12

(B) 1/144

(C) 1/1728

(D) 1/256

11. The number of ways to choose a set of four distinct months from twelve, without regard to order, is:

(A) 330

(B) 495

(C) 462

(D) 512

12. The number of ways to assign four distinct months to four named people, from twelve months, is:

(A) 11880

(B) 12^4

(C) 9880

(D) 20736



ANSWER KEY

PASSAGE 1 — ARCADIA LANDSCAPES (SECTORS & ARCS)

Q1: (B) 4π — Arc = $(72/360) \times 2\pi \times 10 = 4\pi$.

Q2: (C) 20π — Sector area = $(72/360) \times \pi \times 10^2 = 20\pi$.

Q3: (B) 1/5 — Arc ÷ circumference = 72/360 = 1/5.

Q4: (B) 40π — $(144/360) \times \pi \times 100 = 40\pi$.

Q5: (A) $20 + 4\pi$ — Two radii of 10 metres plus the arc of 4π.

Q6: (A) $5\sqrt{10}$ — Sector area = $(1/5)\pi r^2 = 50\pi$, so $r^2 = 250$ and $r = 5\sqrt{10}$.

PASSAGE 2 — CHANCE ANALYTICS (BIRTHDAYS & MONTHS)

Q7: (A) 0.0164 — P(all four birthdays distinct) = $365 \times 364 \times 363 \times 362 / 365^4 \approx 0.9836$. So P(at least two share) = $1 - 0.9836 \approx 0.0164$.

Q8: (A) 55/96 — Distinct months: $12 \times 11 \times 10 \times 9 / 12^4 = 11880/20736 = 55/96$.

Q9: (B) 41/96 — $1 - 55/96 = 41/96$.

Q10: (C) 1/1728 — All four share a month: $12 \times (1/12)^4 = 1/12^3 = 1/1728$.

Q11: (B) 495 — C(12, 4) = 495.

Q12: (A) 11880 — Ordered assignments: $12 \times 11 \times 10 \times 9 = 11880$.



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