INDEPENDENT CAT PREPARATION / ORIGINAL MOCK

# CAT 2026 Prediction Paper 07

## Question paper

68 questions · 120 minutes · Maximum 204 marks

This is an original practice paper informed by recent CAT patterns and the forecast in this study. It is not the official CAT 2026 paper and does not claim to reproduce unreleased questions. Its difficulty has not been calibrated on a candidate cohort.

| SECTION | QUESTIONS | TIME | MARKS |
|---|---|---|---|
| Verbal Ability & Reading Comprehension | 24 | 40 minutes | 72 |
| Data Interpretation & Logical Reasoning | 22 | 40 minutes | 66 |
| Quantitative Ability | 22 | 40 minutes | 66 |

Correct answer: +3. Incorrect MCQ: –1. Incorrect TITA or unanswered question: 0. Each MCQ has exactly one correct option. TITA answers are whole numbers.

Design reference: IMS CAT 2025 exam analysis and the instructions of the official CAT 2026 mock (released 6 November 2026). The 24/22/22 structure, four-question RC passages and four- or five-question DILR sets inform this mock. Original contexts and exact question allocations are authoring choices. Method and source limitations: validation.html. Practice profile: IIM Indore lean.

# VARC · 24 questions

## RC 1 · Ordinary lives in official records

Historians often complain that the past speaks with the voices of the powerful. Archives keep the records that institutions needed: tax rolls, court proceedings, property deeds, the correspondence of officials. People who owned little, wrote little and rarely went to court appear mostly as names in lists, if they appear at all. A history built from such material, critics argue, will inevitably describe the world as administrators saw it.

The complaint is fair, but it can be pushed too far. Records made for one purpose can be read for another. A court case about a stolen coat was created to decide guilt, yet witnesses describe where they slept, what they ate, which neighbours they trusted and how they spoke to one another. Inventories drawn up to settle debts reveal the furniture of rooms that no one thought worth describing. Historians who read such documents against the grain treat them less as statements of fact than as accidental windows.

The method has its own hazards. Testimony given in court was shaped by fear, by the questions asked and by the clerk who wrote it down, often translating speech into formal language. An inventory lists what creditors could sell, not what a household valued. The ordinary life that emerges is therefore filtered twice, first by the institution's purpose and then by the historian's choice of what counts as revealing. There is a risk, too, of treating the vivid exception, the case that happened to be recorded in detail, as typical of lives that left no trace.

Some historians respond by counting rather than quoting. Thousands of inventories, taken together, can show how common certain possessions became, even if no single inventory tells us what its owner felt. Others turn to sources that institutions did not create: songs, objects, the layout of houses, the wear on tools. Each source answers some questions and ignores others. A house plan shows how space was divided, but not who slept where.

What these approaches share is a recognition that silence in the archive is not the same as absence in the past. The task is not to fill the silence with invention, nor to accept it as proof that nothing worth knowing happened, but to work patiently at its edges, reading each document with attention to why it was made and to what it could not help recording.

**V01. Which of the following best states the author's position?** MCQ

A. Because archives record mainly the powerful, the lives of ordinary people cannot be studied.
B. Court records are the most reliable source for the daily lives of the poor.
C. Although archives favour institutional perspectives, careful reading and other kinds of sources can recover parts of ordinary lives if their distortions are kept in view.
D. Historians should stop quoting individual documents and rely only on counting them.

**V02. The author would most likely regard a historian who generalises about a whole social group from one richly detailed court case as** MCQ

A. risking the error of treating a well-documented exception as typical.
B. using the only method available for studying ordinary people.
C. reading the document strictly for the purpose for which it was made.
D. rightly assuming that court testimony is free of distortion.

**V03. According to the passage, an inventory drawn up to settle debts** MCQ

A. shows how the household's members felt about their possessions.
B. records what creditors could sell rather than what the household valued.
C. is less useful than court testimony for every historical question.
D. was written to describe rooms that observers found interesting.

**V04. In the passage, reading a document "against the grain" means** MCQ

A. rejecting any document produced by an institution.
B. correcting the spelling and language of old records.
C. reading documents in the order in which they were filed.
D. using it as evidence of things its makers did not set out to record.

## RC 2 · After the bleaching

When sea temperatures stay unusually high for several weeks, reef-building corals expel the microscopic algae that live in their tissues and supply most of their food. The corals turn white, a condition called bleaching. Bleached corals are not dead; if temperatures fall soon enough, they can take up algae again and recover. If the heat lasts, many starve.

Recovery after a severe bleaching event depends on more than the survival of individual colonies. New corals begin as larvae that drift in the water before settling on a hard surface. A reef that has lost most of its adult corals may still recover if larvae arrive from healthier reefs nearby and if the surfaces where they settle are not smothered by seaweed. On reefs where fishing has removed the fish that graze on seaweed, the algae can spread across the dead coral skeletons, leaving larvae nowhere to settle. Grazing fish, in effect, keep the reef's surfaces open for its next generation. The heat that bleached the reef is then followed by a second, slower injury.

This is why the people who manage reefs pay attention to local conditions they can influence, even though they cannot control ocean temperatures. Protecting grazing fish, reducing the run-off of nutrients that feed seaweed, and limiting damage from anchors and construction all improve the odds that a reef will regain its corals between heat events. Some reefs with such protection have recovered much of their coral cover within a decade.

The difficulty is that the interval between severe heat events is shrinking. A reef that needs ten to fifteen years to recover will not do so if serious bleaching returns every five or six years. Local protection then changes the rate of decline rather than preventing it. Some scientists have proposed more active help,

such as breeding heat-tolerant corals and transplanting them, but these projects work at the scale of hectares while reefs extend over thousands of square kilometres.

None of this makes local management pointless. Reefs that keep their grazers and clear water lose less and recover faster, which buys time and preserves the supply of larvae on which other reefs depend. But it does change what success means. A manager who protects a reef well may still watch it decline. The decisive variable lies elsewhere, in the emissions that drive the warming of the seas.

**V05. The passage mainly argues that** MCQ

A. bleaching kills corals at once, so recovery depends entirely on transplanting new colonies.
B. breeding heat-tolerant corals will soon allow reefs to recover across their whole extent.
C. seaweed is the main cause of coral bleaching.
D. local protection helps reefs survive and recover from bleaching but cannot by itself offset increasingly frequent heat events.

**V06. Which reef would the author expect to recover most slowly after severe bleaching?** MCQ

A. A reef with many grazing fish and clear water that has lost most of its adult corals.
B. A reef where grazing fish have been heavily fished and nutrient run-off is high.
C. A reef close to several healthy reefs that supply larvae.
D. A reef where anchoring and construction have been banned.

**V07. According to the passage, bleached corals** MCQ

A. can recover if the high temperatures end soon enough.
B. are already dead by the time they turn white.
C. expel their algae when the water becomes too cold.
D. recover only if they are transplanted by scientists.

**V08. By saying that the situation "does change what success means", the author implies that** MCQ

A. local management should be abandoned in favour of transplanting heat-tolerant corals.
B. managers can stop any decline if they protect grazing fish.
C. a well-managed reef should be judged by how far it slows decline and sustains larvae, not only by whether its coral cover grows.
D. success should be measured by the number of heat-tolerant corals bred.

## RC 3 · When museums give back

For much of the last two centuries, museums in a few wealthy cities acquired objects from across the world. Some were bought, some were given, and many were taken during wars or under colonial rule, when the people who made or owned them had little power to refuse. Today requests for the return of such objects are common, and museums that once treated their collections as permanent increasingly negotiate their departure.

Museums have long defended their holdings with an argument about access. A great collection, they said, allows visitors to see the cultures of the world side by side, and objects held in well-equipped institutions are protected from loss. Visitors who could never travel to every region of origin can compare traditions in a single afternoon. The argument assumes that the most important audience for an object is the general public of the city where it now sits, and that preservation is best judged by the standards of conservation laboratories.

Those who request returns question both assumptions. For many communities an object is not primarily a specimen to be viewed but a participant in ceremonies, a record of ancestry or a sign of authority. Its absence is felt as an ongoing loss, not a historical fact. Preservation may also mean use: a mask that is danced or a textile that is worn may be cared for in ways that a laboratory would regard as risky but that keep its meaning alive.

Returns do not settle every question. Communities and states may disagree about who should receive an object, and a returned object may be displayed in a national museum rather than restored to the use for which it was made. Some curators worry that returns will empty galleries; experience so far suggests that the effect is gradual, and that collaboration often follows, with loans, shared research and joint exhibitions.

The deeper change is in how ownership is understood. A purchase recorded in a museum's files was once treated as the end of an object's story. Increasingly it is treated as one episode, to be judged in the light of how the object was obtained and of what it still means to the people from whom it came. Museums that accept this view do not stop caring for objects; they share the decision about what care should mean.

**V09. The passage is mainly concerned with** MCQ

A. how claims for the return of museum objects challenge assumptions about audience, preservation and ownership.
B. proving that every object in large museums was obtained by force.
C. arguing that returned objects should always be placed in national museums.
D. describing the techniques used in conservation laboratories.

**V10. The museums' traditional argument about access assumes that** MCQ

A. objects should be used in ceremonies so that their meaning stays alive.
B. the communities that made objects are best placed to conserve them.
C. the public of the city where an object is held is its most important audience.
D. returns lead to loans, shared research and joint exhibitions.

**V11. According to the passage, experience of returns so far suggests that** MCQ

A. returned objects are always restored to their original use.
B. communities and states usually agree about who should receive an object.
C. museums stop caring for the objects that remain with them.
D. galleries are not emptied quickly, and collaboration often follows a return.

**V12. Which statement best reflects how the passage describes the changing view of a purchase recorded in a museum's files?** MCQ

A. It is still regarded as settling ownership once and for all.
B. It is increasingly seen as one episode in an object's history, to be judged by how the object was obtained.
C. It is treated as proof that the museum obtained the object fairly.
D. It is considered irrelevant to any account of the object's history.

## RC 4 · Counting what services produce

Measuring productivity in a factory seems straightforward: count the cars or shirts produced and divide by the hours worked. When output rises faster than hours, productivity has grown. For much of the economy, however, there are no cars or shirts to count. What is the output of a hospital, a school or a law firm?

Statisticians have often answered by measuring what is spent. If a hospital's budget rises, its output is assumed to rise in proportion. This makes productivity growth invisible by construction: if output is defined as inputs, output per input cannot change. Other approaches count activities, such as operations performed or pupils taught. These are better, but they can mislead. A hospital that cures a condition in a single visit instead of three will appear to produce less, and a school that teaches the same number of pupils better will appear unchanged.

The problem matters because services form a large and growing share of modern economies. Some economists argued decades ago that services suffer from a cost disease: a string quartet needs as many musicians and minutes as it did a century ago, while its players' wages rise in line with those in industries that do become more productive. Services therefore become relatively more expensive. The argument is powerful, but it depends partly on how output is measured. A recording can bring the quartet to millions of listeners, and remote consultations let one doctor see more patients. Whether these count as productivity gains depends on whether the measure captures what people value.

Better measurement usually means asking what a service is for. Health care is for health, so output might be measured by improvements in patients' conditions, adjusted for how severe those conditions were. Education is for learning, so output might reflect what pupils can do as a result. Such measures are difficult to construct and open to dispute, since outcomes depend on many things a service does not control. Yet the alternative is to judge services by their budgets or their busyness, which tells us little about whether they are getting better.

The choice of measure is not merely technical. A government that judges hospitals by procedures performed will reward procedures; one that judges them by outcomes will reward health. What is counted tends to become what is pursued.

**V13. Which of the following best summarises the passage?** MCQ

A. Services cannot become more productive, as the cost-disease argument proves.
B. Because services lack countable products, their productivity is hard to measure, and the measures chosen shape both conclusions and behaviour.
C. Hospital budgets are the most accurate available measure of hospital output.
D. Factories measure productivity poorly because they ignore quality.

**V14. If a school's output is measured by the number of pupils taught, a school that improves its teaching without changing its enrolment would** MCQ

A. appear more productive because its budget would rise.
B. appear less productive because it would need fewer lessons.
C. be shown to suffer from the cost disease.
D. appear to produce no more than before.

**V15. The author mentions recordings of a string quartet in order to** MCQ

A. show that live music has become cheaper over time.
B. prove that the cost-disease argument is entirely mistaken.
C. suggest that whether a service gains in productivity depends on how its output is defined.
D. illustrate how statisticians measure services by their budgets.

**V16. Which of the following best illustrates the point made in the final paragraph?** MCQ

A. Police units judged by the number of arrests make more arrests for minor offences without reducing crime.
B. A factory increases its output by adding a night shift.
C. A hospital's budget rises because of general inflation.
D. A school adopts a new textbook chosen by its teachers.

**V17. Choose the best summary.**

**Some public libraries now lend more than books: drills, sewing machines, telescopes and even cake tins. The idea can look like a departure from the library's purpose, but it follows an old logic. Libraries have always pooled resources that individuals use occasionally and cannot easily afford to own. A drill, like an encyclopaedia, spends most of its life idle in a single household. Lending objects also brings different people into the building, some of whom then discover its other services. The practical obstacles are real: tools break, need checking and occupy space. Yet libraries that manage these obstacles report that such collections are heavily used, which suggests a need that shops and private ownership were not meeting.** MCQ

A. Libraries that lend tools have abandoned their original purpose of lending books.
B. Tools wear out quickly, so libraries should not lend them.
C. Lending objects extends the library's old role of pooling things people use only occasionally, and despite practical costs it appears to meet a real need.
D. Most households own drills that they rarely use.

**V18. Choose the best summary.**

**Reintroducing large predators to landscapes from which they disappeared is often justified by their effects on other species. Wolves, for example, may reduce grazing by deer near rivers, allowing trees to regrow and changing the habitat for birds and insects. Such cascades are real in some places, but they are harder to demonstrate than popular accounts suggest. Rivers change for many reasons, deer numbers respond to hunting and weather, and the predator's effect varies from valley to valley. This does not weaken the case for reintroduction, which can rest on the value of the species itself. It does suggest caution about promising dramatic ecological transformations that may not occur everywhere.** MCQ

A. Reintroduced predators can have wide ecological effects, but these vary and are hard to prove, so the case for them should not rest on promises of dramatic change.
B. Wolves always cause trees to regrow along rivers by reducing deer grazing.
C. Reintroducing predators is unjustified because their effects cannot be demonstrated.
D. Hunting and weather matter more than predators in every ecosystem.

**V19. Choose the best position for the missing sentence.**

**Sentence: Without that limit, an opening offer would carry no information at all.**

**In many markets, buyers and sellers do not reveal their true limits at the start of a negotiation. (1) A seller opens high and a buyer opens low, and both expect to move towards each other. (2) Yet the opening offer still matters, because each side assumes the other cannot stray too far from reality without losing credibility. (3) A seller who asks ten times the usual price is not really bargaining; such an offer tells the buyer that no sale is intended, or that the seller does not understand the market. (4) Opening offers therefore work as anchors only within a range that both sides regard as plausible, which is why experienced negotiators study typical prices before they begin.** MCQ

A. Position (1)
B. Position (3)
C. Position (2)
D. Position (4)

**V20. Choose the best position for the missing sentence.**

**Sentence: The newcomers, in other words, had changed the soil before anyone was watching.**

**Earthworms are often treated as a sign of healthy soil. (1) In parts of northern North America, however, forests developed without them after the last ice age, and their floors are covered by a thick layer of slowly decaying leaves. (2) Worms introduced by anglers and gardeners consume that layer within a few years. (3) Native plants that depend on the leaf layer for moisture and shelter decline, and some ground-nesting birds lose cover. By the time ecologists began to study these changes, the leaf layer had already vanished from large areas. (4) Restoring it is difficult, because the worms cannot be removed once they are established.** MCQ

A. Position (1)
B. Position (2)
C. Position (3)
D. Position (4)

**V21. Arrange the sentences and enter their numbers without spaces.**

**1. Air trapped in the gaps between the fibres is a poor conductor of heat.**
**2. A loose weave holds more of that still air, so it can insulate better than a tight one.**
**3. Why does a woollen jumper keep you warm even though it is full of tiny holes?**
**4. The answer depends less on the wool itself than on the way it is knitted.** TITA

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**V22. Arrange the sentences and enter their numbers without spaces.**

**1. Some fail because they are toxic, others because they do not work in people as they did in cells or animals.**
**2. The few that succeed must therefore pay for the many that do not, which helps explain the high price of new medicines.**
**3. Most of them never reach the market.**
**4. Each year pharmaceutical companies test thousands of compounds that look promising in the laboratory.** TITA

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**V23. Four sentences form a coherent paragraph. Enter the odd sentence number.**

**1. Ice skating became a popular winter pastime in several European cities in the nineteenth century.**
**2. Glaciers store a large share of the world's fresh water as ice.**
**3. In many mountain regions their summer melt feeds rivers during the driest months.**
**4. As glaciers shrink, that melt first increases and then declines.**
**5. Communities downstream may therefore enjoy a temporary surplus of water before facing shortages.** TITA

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**V24. Four sentences form a coherent paragraph. Enter the odd sentence number.**

**1. A password that is long and random is hard for an attacker to guess.**
**2. It is also hard for its owner to remember, which tempts people to reuse it on many sites.**
**3. Reuse means that a leak from one careless website can expose accounts elsewhere.**
**4. Password managers address this by remembering a different random password for each site.**
**5. Early computers stored their data on punched cards and magnetic tape.** TITA

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# DILR · 22 questions

## Eight friends at a round table

Eight friends A, B, C, D, E, F, G and H sit around a circular table at eight equally spaced seats, all facing the centre.
B sits directly opposite A.
C sits immediately clockwise of B.
D and E sit next to each other.
F does not sit next to A, and H does not sit next to B.
G sits two seats clockwise of D, with exactly one person between them.

Any additional condition or change in a question applies only to that question.

**D01. How many different seating arrangements satisfy all the conditions? (Arrangements that are rotations of each other count as the same.)** TITA

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**D02. Which of the following pairs sit next to each other in every possible arrangement?** MCQ

A. G and H
B. E and F
C. C and G
D. A and D

**D03. Counting clockwise from A, how many people sit strictly between A and C?** TITA

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**D04. If E sits immediately clockwise of D, who sits opposite G?** MCQ

A. C
B. H
C. E
D. F

**D05. If F sits opposite D, who sits immediately clockwise of A?** MCQ

A. D
B. G
C. E
D. H

## Output and defects at four plants

Four plants K, L, M and N together produced 2,100 units last month. Plant M produced 400 units. L produced 25% more units than K, and N produced as many units as K and M together.
The defect rates were 5% at K, 4% at L, 7.5% at M and 2.5% at N (defect rate = defective units as a percentage of the plant's output).

Any additional condition or change in a question applies only to that question.

**D06. How many units did plant N produce?** TITA

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**D07. Which plant produced the largest number of defective units?** MCQ

A. K
B. L
C. N
D. M

**D08. How many non-defective units did the four plants produce in all?** TITA

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**D09. Each defective unit is reworked at a cost of ₹15. What is the total rework cost, in rupees?** TITA

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**D10. Which of the following is closest to the overall defect rate of the four plants together?** MCQ

A. 3.8%
B. 4.3%
C. 4.0%
D. 4.6%

## Six tasks of a project

A project consists of six tasks. Each task can start only after all the tasks it needs have finished; tasks that do not depend on each other can run at the same time, and enough staff are available for this.

Task | Duration (days) | Can start only after
A | 3 | —
B | 5 | —
C | 2 | A
D | 4 | A, B

E | 6 | C
F | 3 | D, E

Any additional condition or change in a question applies only to that question.

**D11. What is the minimum number of days needed to complete the project?** TITA

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**D12. Which of the following tasks can be delayed by 2 days without delaying the completion of the project?** MCQ

A. E
B. C
C. A
D. B

**D13. If task E takes 8 days instead of 6, what is the minimum number of days needed for the project?** TITA

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**D14. Shortening which one of the following tasks by one day shortens the whole project by one day?** MCQ

A. D
B. None of these tasks
C. E
D. B

## Coins in five boxes

Five boxes P, Q, R, S and T together contain 36 coins. Each box contains at least 2 coins, no two boxes contain the same number of coins, and no box contains exactly 4 coins.
P contains more coins than Q but fewer than R.
R contains twice as many coins as T.
S contains an odd number of coins.
Q and T together contain 9 coins.

Any additional condition or change in a question applies only to that question.

**D15. What is the largest possible number of coins in box S?** TITA

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**D16. Which box always contains the second-highest number of coins?** MCQ

A. S
B. P
C. Q
D. T

**D17. If S contains more coins than T, how many coins does P contain?** TITA

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**D18. How many different distributions of coins satisfy all the conditions?** MCQ

A. 8
B. 5
C. 4
D. 6

## Truth-tellers and liars

Each of five people A, B, C, D and E is either a truth-teller, who always tells the truth, or a liar, who always lies. They make these statements:
A: “B is a liar.”
B: “C and D are of the same type.”
C: “Exactly two of us five are liars.”
D: “A is a truth-teller.”
E: “D is a liar.”

Any additional condition or change in a question applies only to that question.

**D19. How many of the five are liars?** TITA

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**D20. Who is certainly a liar?** MCQ

A. A
B. B
C. D
D. C

**D21. If A is a truth-teller, how many of B, C and E are truth-tellers?** TITA

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**D22. If E is a truth-teller, which of the following must be true?** MCQ

A. B is a truth-teller
B. D is a truth-teller
C. A is a truth-teller
D. C is a truth-teller

## QA · 22 questions

**Q01. The difference between the compound interest and the simple interest on a sum for 2 years at 10% per annum is ₹150. What is the sum, in rupees?** MCQ

A. 12000
B. 15000
C. 18000
D. 16500

**Q02. Pipe A fills a tank in 20 hours and pipe B in 30 hours; outlet C alone empties the full tank in 15 hours. A and B are opened together on an empty tank, and after 4 hours C is also opened. How many more hours are needed to fill the tank?** TITA

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**Q03. A carpenter makes chairs and tables. Each chair needs 2 hours of cutting and 1 hour of polishing; each table needs 3 hours of cutting and 4 hours of polishing. One week he used exactly 70 hours of cutting and 60 hours of polishing. How many tables did he make?** MCQ

A. 12
B. 8
C. 14
D. 10

**Q04. In triangle ABC, D lies on AB and E on AC with DE parallel to BC and AD : DB = 2 : 3. The trapezium DBCE has area 84 cm². What is the area of triangle ABC, in cm²?** MCQ

A. 100
B. 96
C. 105
D. 120

**Q05. Two runners start together from the same point of a 400 m circular track and run in opposite directions at 6 m/s and 4 m/s. Up to the first moment when both are again at the starting point together, at how many distinct points of the track do they meet?** TITA

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**Q06. A invested ₹50,000 for the full year in a business, and B invested ₹80,000 for part of the year. Of the annual profit of ₹1,50,000, A received ₹90,000. For how many months was B's money invested?** MCQ

A. 6
B. 4
C. 5
D. 8

**Q07. What is the units digit of 3^2027 × 7^2026?** MCQ

A. 1
B. 7
C. 3
D. 9

**Q08. What is the maximum value of $-2x^2 + 12x + 7$ over all real x?** TITA

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**Q09. What is the sum of all real numbers x that satisfy $|2x - 5| = x + 2$?** MCQ

A. 8
B. 7
C. 6
D. 1

**Q10. A vessel contains 80 litres of milk. Twenty litres are drawn out and replaced with water, and this is done once more. How many litres of milk are now in the vessel?** TITA

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**Q11. If $\log_3(x - 2) + \log_3(x + 6) = 2$, what is the value of x?** MCQ

A. 7
B. 4
C. 5
D. 3

**Q12. What is the area, in square units, of the triangle with vertices (1, 2), (7, 5) and (3, 10)?** TITA

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**Q13. How many zeros are there at the end of 125! (125 factorial)?** TITA

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**Q14. A's salary is 20% more than B's. B's salary then rises by 20% and A's by 10%. By what percentage is A's new salary greater than B's new salary?** MCQ

A. 8
B. 10
C. 12.5
D. 15

**Q15. A function satisfies f(0) = 4 and f(x + 1) = f(x) + 2x + 1 for every whole number x. What is f(10)?** TITA

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**Q16. Two circles of radii 9 cm and 4 cm touch each other externally. What is the length, in cm, of a direct common tangent between their points of contact?** MCQ

A. 12
B. 13
C. 10
D. 11

**Q17. In how many ways can a committee of 4 be chosen from 6 men and 5 women if it must include at least 2 women?** TITA

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**Q18. The average age of a family of six is 25 years, and its youngest member is 4 years old. What was the average age of the family just before the youngest member was born?** MCQ

A. 24.8
B. 26
C. 25.2
D. 25

**Q19. What is the value of $\log_2 3 \times \log_3 4 \times \log_4 5 \times \ldots \times \log_{63} 64$?** MCQ

A. 5
B. 6
C. 7
D. 64

**Q20. How many ordered pairs (x, y) of positive integers satisfy 3x + 5y = 101?** MCQ

A. 6
B. 8
C. 5
D. 7

**Q21. An infinite geometric progression has sum 24, and the sum of the squares of its terms is 192. What is its first term?** MCQ

A. 16
B. 8
C. 18
D. 12

**Q22. A cyclist and a runner leave town A at the same time for town B, 36 km away, at 18 km/h and 9 km/h respectively. The cyclist rests for 20 minutes at B and then rides back towards A at the same speed. How far from A, in km, do they meet?** MCQ

A. 26
B. 24
C. 27
D. 25