

ANSWER KEY — 5 OCTOBER 2026

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
B	D	C	A	C	B	D	A	B	D
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
C	A	B	C	A	D	A	B	D	C
Q21	Q22	Q23	Q24	Q25					
D	B	A	B	C					

LEGAL REASONING

Q1 B CPA 2019 S.2(7) — self-employment/livelihood exception **HARD**

Section 2(7) excludes a person who buys goods or services for a 'commercial purpose', which would ordinarily cover income-generating equipment. The explanation to the section, however, carves out a vital exception: where the goods or services are bought and used by a person exclusively for the purpose of earning a livelihood by means of self-employment, that person remains a consumer. Sunita operates the embroidery machine herself in a one-woman unit, so the purchase falls squarely within the livelihood-by-self-employment exception and she retains consumer status, making option B correct. Option A is wrong because it ignores the explanation entirely and treats every income-linked purchase as commercial. Option C invents a blanket exclusion of 'capital goods' that the Act does not contain. Option D fabricates an employee-count and income-threshold test; the only questions that matter are whether the use is exclusively for livelihood and whether she works the machine herself through self-employment.

Examiner's note — the trap: Option A is the trap: students correctly recall that 'commercial purpose' is excluded but forget the livelihood-by-self-employment explanation that rescues the small self-operated trader.

Q2 D CPA 2019 S.35 — District Commission pecuniary jurisdiction **HARD**

Section 35 confers original jurisdiction on the District Commission where the value of the goods or services paid as consideration does not exceed fifty lakh rupees. The consideration here is forty-five lakh rupees, which is below that ceiling, so the complaint must be filed before the District Commission at first instance, making option D correct. Option A is wrong because a sum 'running into lakhs' is not itself disqualifying; the statutory line is drawn at fifty lakh, and forty-five lakh falls under it. Option B wrongly routes every high-value or defective-service matter to the National Commission, ignoring the tiered pecuniary structure. Option C invents a right of free choice between fora and an incorrect one-crore concurrent band; jurisdiction under the 2019 Act is tied to defined consideration slabs, not to the complainant's preference. The correct forum is fixed by the value of the consideration paid, which is the test the section adopts.

Examiner's note — the trap: Option A tempts students who associate 'lakhs of rupees' with seriousness and assume a District Commission handles only trivial sums; the statute is numeric, and 45 lakh is under the 50-lakh line.

Q3 C CPA 2019 S.69 — limitation and condonation of delay **ELITE**

Section 69 lays down a two-year limitation period running from the date the cause of action arises, so the complaint filed two years and three months later is prima facie time-barred. The section's proviso, however, permits the Commission to entertain a complaint after that period if the complainant satisfies it that there was sufficient cause for not filing within time, and the Commission must record its reasons for condoning the delay. An eight-month coma evidenced by hospital records is a textbook instance of sufficient cause, so option C is correct. Option A wrongly treats the period as absolute, ignoring the express proviso. Option B wrongly treats limitation as merely directory and open-ended, which would make the two-year period meaningless. Option D wrongly outsources condonation to a civil court; the power to condone and to record reasons lies with the Commission itself under the same section, not with any external forum.

Examiner's note — the trap: Option A is the strongest distractor — students who memorise 'two years' as a hard bar overlook the sufficient-cause proviso that lets the Commission condone a genuinely explained delay.

Q4 A CPA 2019 S.2(47) — unfair trade practice **MED**

Section 2(47) defines an unfair trade practice to include making a false statement that goods or services are of a particular standard, quality, grade or model. Advertising that the purifiers are 'certified to meet the IS 10500 standard' when no such certification exists is precisely a false representation about the standard or grade of the goods, so option A is correct. Option B is wrong because misleading advertising claims about standards fall squarely within the Act; they are not relegated to civil courts. Option C misapplies 'restrictive trade practice', which concerns manipulating conditions of delivery, supply or price, not false quality claims. Option D wrongly reclassifies a tangible product as a 'service' to invoke deficiency under Section 2(11); a water purifier that is sold is a good, and the mischief here is a false standard claim, which is the defining example of an unfair trade practice under Section 2(47).

Examiner's note — the trap: Option C is the trap: 'restrictive trade practice' sounds technical and adjacent, but it targets delivery/supply manipulation, not false claims about a product's certified standard.

Q5 C Natural justice — audi alteram partem **HARD**

The audi alteram partem limb of natural justice requires that no person be condemned without notice and an opportunity to be heard. The municipal authority cancelled the trader's licence — a decision affecting his livelihood — without issuing any notice or allowing him to explain, so the cancellation is most directly assailable for breaching the right to a hearing, making option C correct. Option A invokes Wednesbury unreasonableness, but the facts disclose no irrationality in the outcome; the vice is procedural, not substantive. Option B invokes legitimate expectation, but nothing shows a settled renewal practice, and even an expectation would at most entitle him to a hearing — which again points back to the audi alteram partem ground. Option D asserts the authority lacked power to deal with licences at all, which the facts do not support; the authority plainly licenses traders, and its error lay in how, not whether, it could act.

Examiner's note — the trap: Option A attracts students who sense the cancellation is 'unfair'; but unfairness of procedure (no hearing) is natural justice, whereas Wednesbury attacks an irrational outcome, which is not what the facts show.

Q6 B Natural justice — nemo judex in causa sua (rule against bias) **HARD**

The nemo judex in causa sua rule forbids a person from sitting in judgment over a cause in which he is himself interested. Here the officer who lodged the complaint — the accuser — is also placed on the panel that decides guilt, which means an interested party is adjudicating his own accusation; this is the paradigm of institutional bias, so option B is correct. Option A invokes the hearing limb (cross-examination), but the defect identified on these facts is the composition of the deciding body, not the denial of an opportunity to test witnesses. Option C invokes legitimate expectation, which protects substantive or procedural benefits arising from past practice or promise, not impartiality as such. Option D invokes proportionality, a doctrine about whether a measure is excessive relative to its aim; it has nothing to do with a judge being interested in the cause. The accuser-as-judge overlap is a pure bias problem.

Examiner's note — the trap: Option A is tempting because departmental inquiries often do raise cross-examination issues; but the stem isolates the accuser sitting as judge, which is bias (nemo judex), not the hearing rule.

Q7 D Legitimate expectation — yielding to overriding public interest **ELITE**

The doctrine of legitimate expectation protects a person who, on a settled past practice or a clear promise, reasonably expects a benefit or a hearing before withdrawal. A five-year operation of the scholarship generates such an expectation, so the doctrine is engaged. Crucially, however, the expectation is not an absolute entitlement: it yields where an overriding public interest justifies the change of course. A documented fiscal emergency that would otherwise force cuts to essential health spending is exactly such an overriding interest, so the claim most likely fails — making option D correct. Option A wrongly converts a five-year practice into a vested, un-withdrawable right. Option B wrongly denies that the doctrine exists in Indian law, where it is firmly recognised. Option C wrongly asserts that public interest can never override the expectation, which inverts the settled balancing test under which a genuine, demonstrated public interest prevails over the individual's expectation.

Examiner's note — the trap: Option A is the primary trap: students treat long-standing practice as creating an irrevocable right, forgetting that legitimate expectation always bows to a bona fide overriding public interest.

Q8 A Delegated legislation — ultra vires the parent statute **MED**

Delegated legislation is valid only so far as it stays within the power conferred by the parent statute; a rule that travels beyond that power is ultra vires and void. The parent statute here authorises rules 'regulating the registration of vehicles' — an administrative, procedural power. Creating a two-year term of imprisonment is a penal measure that the parent Act never conferred, so the rule exceeds the delegated power and is ultra vires, making option A correct. Option B wrongly asserts an inherent power to attach penalties; penal consequences, especially imprisonment, require clear statutory authorisation. Option C wrongly suggests a delegate may legislate on anything it deems incidental, which would defeat the whole doctrine of limited delegation. Option D wrongly rests the defect solely on Wednesbury unreasonableness about the length of the term; the deeper and decisive vice is the absence of any conferred power to imprison at all, which is a question of vires, not merely of reasonableness.

Examiner's note — the trap: Option D is the distractor: students fixate on 'two years is too harsh' (a reasonableness point) and miss that the authority had no power to create imprisonment in the first place — an ultra vires defect.

LOGICAL REASONING

Q9 B Parallel reasoning — matching structure (affirming the consequent) **HARD**

The Anita argument has the form: all P are Q; x is Q; therefore x is P — the fallacy of affirming the consequent, which treats a sufficient condition (mastery is enough for the ability) as necessary. The correct parallel must share this exact shape. Option B runs: every diligent clerk files on time (all P are Q); Mohan files on time (x is Q); therefore Mohan is a diligent clerk (x is P) — an identical affirming-the-consequent structure, so B is correct. Option A is a valid modus tollens (not-Q, therefore not-P), so its reasoning is sound and does not match a fallacy. Option C is also valid: no trained pilot fears turbulence, Rita fears turbulence, so Rita is not a trained pilot (denying by contradiction). Option D is a valid modus ponens: all steel bridges bear loads, this is steel, so it bears loads. Only B reproduces the Anita argument's invalid pattern.

Examiner's note — the trap: Option D is the trap because it mentions a universal rule and an instance, which feels similar; but D is a valid *modus ponens*, whereas the Anita argument runs the inference backwards, as only B does.

Q10 D Naming the logical flaw — affirming the consequent MED

The Anita argument reasons: mastery is sufficient for the ability to answer unfamiliar questions; Anita has the ability; therefore Anita has mastery. This treats a merely sufficient condition as though it were also necessary — the formal fallacy called affirming the consequent, so option D is correct. Option A (hasty generalisation) describes leaping to a universal rule from scanty instances, but the argument does not generalise from samples; it starts with a universal and misapplies it. Option B (circular reasoning) requires the conclusion to be smuggled into the premises, which does not happen here; the premises are independent of the conclusion. Option C (false dilemma) involves wrongly restricting the field to two options, which is absent entirely. The defect is purely about the direction of a conditional inference: the ability could have other causes, so possessing it does not establish mastery, which is exactly what affirming the consequent captures.

Examiner's note — the trap: Option A tempts students who hear 'every student' and assume an over-broad generalisation; but the universal is a given premise, and the error lies in reversing the conditional, i.e. affirming the consequent.

Q11 C Parallel reasoning — identifying the non-matching structure ELITE

Three options must share the Anita structure (all P are Q; x is Q; so x is P — affirming the consequent) and one must differ. Option A: all who studied can summarise; Priya can summarise; so she studied — affirming the consequent, matches. Option B: all copper alloys conduct; this conducts; so it contains copper — affirming the consequent, matches. Option D: all well-irrigated fields yield a surplus; this yields a surplus; so it was well irrigated — affirming the consequent, matches. Option C, however, runs: all liars contradict themselves under cross-examination; this witness did NOT contradict himself; so he did not lie — this is valid *modus tollens* (not-Q, therefore not-P), a sound inference that does not share the fallacy. Hence C is the odd one out and the correct answer. The key discriminator is whether the second premise affirms the consequent (Q) or denies it (not-Q); only C denies it.

Examiner's note — the trap: The trap is reading C quickly and assuming it 'looks like the others'; it alone has a negated second premise, converting it into valid *modus tollens* rather than the shared fallacy.

Q12 A Parallel reasoning — supplying the premise that validates the inference HARD

The Anita argument fails because mastery is only sufficient, not necessary, for the ability to answer unfamiliar questions; the ability could arise some other way. To make 'Anita can answer, therefore she has mastered' valid, the ability must be tied back to mastery as its only source — that is, the condition must be made necessary. Option A does exactly this: 'Only students who have mastered the fundamentals can answer unfamiliar questions' means the ability cannot occur without mastery, so Anita's ability now entails mastery, making A correct. Option B asserts some able students lack mastery, which positively breaks the inference rather than saving it. Option C adds irrelevant information about other subjects and does nothing to link ability to mastery in geometry. Option D merely restates the original sufficiency (mastery leads to the ability) in different words, which was already given and is exactly the premise that does not validate the backward inference. Only the 'only' phrasing in A supplies necessity.

Examiner's note — the trap: Option D is the trap: it sounds like a strengthening restatement, but it repeats the sufficient-condition claim already present; validity needs the converse (necessity), which only A's 'only' supplies.

Q13 B Bold-face function — evidence versus conclusion HARD

The first boldface states that the subsidy has worsened congestion and air quality — a factual finding the columnist uses as a reason to turn against the policy; it is evidence (a premise) directed at the eventual recommendation. The second boldface states that the subsidy should be phased out over three years — this is the recommendation the whole piece is built to support, i.e. the main conclusion. Option B captures exactly this evidence-then-conclusion pairing and is correct. Option A inverts the roles, calling the first the conclusion and the second an opponent's objection, which misreads both. Option C calls the first a concession and the second the sole supporting evidence, reversing the logical flow entirely. Option D claims the two are unrelated independent conclusions, but the second plainly rests on the first (and on the three-cities evidence), so they are not independent. Recognising which boldface is supported by the rest of the passage identifies it as the conclusion.

Examiner's note — the trap: Option A is the classic bold-face trap — swapping premise and conclusion; test each by asking which statement the rest of the passage is marshalled to support (the second), making it the conclusion.

Q14 C Method of reasoning — function of the counter-examples MED

The supporters predict that withdrawing the subsidy would cripple downtown commerce. The columnist answers by citing three comparable cities that scrapped identical subsidies and saw downtown footfall rise, not fall. The role of that evidence is therefore to rebut the supporters' prediction by presenting cases where the feared outcome did not occur and the opposite happened, making option C correct. Option A misassigns the evidence to proving the first boldface claim about congestion and air quality in the columnist's own city, but the three-cities data speaks to commerce after withdrawal, not to local pollution. Option B says the evidence concedes a genuine risk, but the evidence does the reverse — it undercuts the claimed risk. Option D overstates the evidence into a claim that pedestrianisation is the only possible use of the space, which the columnist never argues; the cities example is used narrowly to counter a prediction, not to establish an exclusive land-use conclusion.

Examiner's note — the trap: Option A misdirects students to the pollution claim; but the cities' footfall data answers the commerce objection, so its function is rebuttal of the supporters' prediction, not proof of the congestion point.

Q15 A Assumption — analogical reliance on comparable cases **HARD**

The columnist's argument leans on the experience of three other cities to predict what would happen if her own city withdrew the subsidy. That inference works only if those cities are relevantly similar to hers — comparable enough that their results transfer. Option A states exactly this bridging assumption and is correct: without it, the analogy collapses and the three-cities evidence proves nothing about her city. Option B is far too strong — the argument need not assume that no city has ever suffered a retail collapse; it only needs the comparison cities to be a reliable guide. Option C about supporters admitting original error is irrelevant to the inference and unsupported by the passage. Option D, that clean air always outranks commerce in every circumstance, is a sweeping value claim the columnist never relies on; her case is empirical (the benefit failed while costs rose), not a universal ranking of air quality over commerce. The load-bearing assumption is comparability.

Examiner's note — the trap: Option B is the trap: it looks like it defends the argument, but it is an over-strong universal the argument does not need; analogical reasoning only requires the sampled cities to be relevantly comparable, as A states.

Q16 D Main conclusion identification **EASY**

The main conclusion is the single claim the rest of the passage is assembled to support. Every strand — the worsening congestion, the rebuttal of the commerce objection, the three-cities footfall data — builds toward the recommendation that the subsidy should be phased out over a fixed three-year schedule rather than defended. That is precisely the second boldface sentence, so option D is correct. Option A (that the three cities were right to scrap their subsidies) is a supporting observation, not the point the columnist is arguing for about her own city. Option B (that supporters are hostile to pedestrians and transit) is an imputed motive the columnist explicitly disclaims, saying her case rests on evidence, not hostility. Option C (that downtown commerce depends entirely on subsidised parking) is the supporters' position, which the columnist is attacking, not asserting. Only D states the recommendation the whole argument is directed at establishing.

Examiner's note — the trap: Option C restates the opponents' claim; students who skim may pick it because it appears in the passage, but it is the view being rebutted, not the columnist's conclusion.

QUANTITATIVE TECHNIQUES

Q17 A Mensuration — perimeter of a rectangle **MED**

Fencing the full boundary of a rectangle requires its perimeter, given by $P = 2 \times (\text{length} + \text{width})$. Substituting the field's dimensions, $P = 2 \times (120 + 90) = 2 \times 210 = 420$ metres, so option A is correct. Option B, 400 m, arises from mistakenly adding 120 and 80 (misreading the width as 80) and doubling, or from a rounding slip. Option C, 210 m, is the un-doubled sum $(120 + 90)$ and is the single most common error — forgetting that a rectangle has two lengths and two widths. Option D, 440 m, comes from doubling an incorrect sum of 220. The method is mechanical but order matters: add the two distinct side lengths first, then multiply by two, because the perimeter counts each of the four sides. Only 420 m reconciles with both given dimensions under the formula $P = 2(l + w)$.

Examiner's note — the trap: Option C (210 m) is the designed trap — it is length plus width without the factor of two; students who forget a rectangle has two pairs of equal sides land on it.

Q18 B Mensuration — volume of a cylinder **HARD**

The volume of a cylinder is $V = \pi \times r^2 \times h$. With $r = 7$ m, $h = 15$ m and $\pi = 22/7$, $V = (22/7) \times 7^2 \times 15 = (22/7) \times 49 \times 15$. The 7 in the denominator cancels one factor of 49 to leave $22 \times 7 \times 15 = 22 \times 105 = 2310$ cubic metres, so option B is correct. Option A, 1155 m^3 , is exactly half of the true value and results from using $r^2 = 24.5$ or from halving in error (as if computing a cone without the one-third factor applied correctly). Option C, 4620 m^3 , is double the correct volume, the product of using $r = 14$ (the diameter) in place of $r = 7$ would actually quadruple it, so 4620 reflects a doubling slip. Option D, 2100 m^3 , drops the $22/7$ refinement and approximates loosely. Careful cancellation of 49 by the 7 in $22/7$ yields the clean figure 2310 m^3 .

Examiner's note — the trap: Option C (4620) catches students who confuse radius with diameter or who double somewhere in the cancellation; always confirm $r = 7$, not 14, before squaring.

Q19 D Mensuration — curved surface area and costing **HARD**

Only the lateral (curved) surface is painted, so use the curved surface area of a cylinder, $\text{CSA} = 2 \times \pi \times r \times h$. With $r = 7$, $h = 15$ and $\pi = 22/7$, $\text{CSA} = 2 \times (22/7) \times 7 \times 15$; the 7 cancels the denominator, leaving $2 \times 22 \times 15 = 660$ square metres. The cost at 20 rupees per square metre is $660 \times 20 = 13,200$ rupees, so option D is correct. Option A, 19,360, uses the total surface area $2 \pi r (r + h) = 2 \times (22/7) \times 7 \times 22 = 968 \text{ m}^2$, then $968 \times 20 = 19,360$ — the error of including the two circular ends, which are not painted. Option C, 6600, multiplies 660 by 10 instead of 20, a rate slip. Option B, 9240, comes from an incorrect CSA of 462 m^2 . The decisive step is using CSA (curved only), not TSA, because only the lateral surface is to be painted.

Examiner's note — the trap: Option A (19,360) is the strongest trap — it uses total surface area including the top and bottom circles; the stem restricts painting to the curved surface, so the ends must be excluded.

Q20 C Mensuration — volume of excavation (circular base x depth) **ELITE**

Deepening the pond uniformly by 2.5 m excavates a flat cylindrical layer whose volume is the pond's circular area multiplied by the depth removed: $V = \pi \times r^2 \times \text{depth}$. The circular area with $r = 14$ and $\pi = 22/7$ is $(22/7) \times 14^2 = (22/7) \times 196 = 22 \times 28 = 616$ square

metres. Multiplying by the 2.5 m depth gives $616 \times 2.5 = 1540$ cubic metres, so option C is correct. Option A, 616 m^3 , is the area in m^2 mis-stated as a volume — it forgets to multiply by the depth. Option B, 1232 m^3 , uses a depth of 2 m instead of 2.5 m (616×2). Option D, 3080 m^3 , uses a depth of 5 m (616×5), doubling the true depth. The two-stage method — first the base area via πr^2 , then multiply by the uniform depth — is what separates 1540 from the near-neighbours.

Examiner's note — the trap: Option A (616) is the elite trap: it is the correct base area but omits the depth multiplication; a volume must carry three length dimensions, so the 2.5 m factor is essential.

Q21 **D** Time-speed-distance — unit conversion m/s to km/h **MED**

Speed is distance divided by time: 100 metres in 10 seconds gives $100 / 10 = 10$ metres per second. To convert metres per second to kilometres per hour, multiply by $18/5$ (since $1 \text{ m/s} = 3.6 \text{ km/h}$). Thus $10 \times 18/5 = 10 \times 3.6 = 36 \text{ km/h}$, so option D is correct. Option A, 30 km/h, results from multiplying by 3 instead of 3.6, a common truncation of the conversion factor. Option B, 10 km/h, mistakes the m/s value for the km/h value, forgetting to convert at all. Option C, 40 km/h, over-rounds the factor to 4. The reliable method is to compute the speed in m/s first (10 m/s) and then apply the exact factor $18/5$; multiplying 10 by 18 gives 180, and dividing by 5 gives 36. Only 36 km/h matches the exact conversion.

Examiner's note — the trap: Option B (10 km/h) traps students who stop at the m/s figure and forget the conversion; option A (30) traps those who use 3 instead of the correct 3.6 factor.

Q22 **B** Time-speed-distance — average speed with time in minutes **MED**

Average speed equals total distance divided by total time, with the units made consistent. Cyclist C covers 40 km in 80 minutes; converting 80 minutes to hours gives $80 / 60 = 4/3$ hours. Speed = $40 / (4/3) = 40 \times 3/4 = 30 \text{ km/h}$, so option B is correct. Option A, 50 km/h, comes from dividing 40 by 0.8 (treating 80 minutes as 0.8 hour), a conversion error. Option C, 32 km/h, results from a slip in the division. Option D, 28 km/h, has no clean derivation and is a near-value distractor. The crucial step is converting minutes to hours correctly: 80 minutes is one and one-third hours, not 0.8 of an hour. Dividing the 40 km by $4/3$ hours — equivalently multiplying by $3/4$ — yields 30 km/h. Keeping distance in km and time in hours makes the answer come out directly in km/h.

Examiner's note — the trap: Option A (50) is the trap: students read '80 minutes' as '0.8 hours' and divide 40 by 0.8; 80 minutes is $4/3$ hours, which gives 30 km/h, not 50.

Q23 **A** Time-speed-distance — beating distance in a race **HARD**

Runner A's sprint speed is $100 \text{ m} / 10 \text{ s} = 10 \text{ m/s}$. Runner B's speed from the 400 m event is $400 \text{ m} / 50 \text{ s} = 8 \text{ m/s}$. In a 100 m race A finishes in $100 / 10 = 10$ seconds. In those same 10 seconds B, travelling at 8 m/s, covers $8 \times 10 = 80$ metres. So when A crosses the line, B is still $100 - 80 = 20$ metres short, meaning A beats B by 20 metres, making option A correct. Option B, 25 m, assumes B's speed is 7.5 m/s (an incorrect reading of B's data). Option C, 12.5 m, confuses the time gap (B needs $100/8 = 12.5 \text{ s}$, i.e. 2.5 s more) with a distance. Option D, 16 m, uses a wrong elapsed time. The standard 'beats by' method fixes the winner's finish time, then finds how far the loser has travelled in that time; the shortfall is the beating distance.

Examiner's note — the trap: Option C (12.5 m) is the trap: 12.5 is B's finishing time in seconds (and the time gap is 2.5 s). The question asks for distance, so compute how far B has gone when A finishes — 80 m — leaving a 20 m margin.

Q24 **B** Time-speed-distance — average speed over equal distances (harmonic mean) **ELITE**

Average speed for a journey is total distance divided by total time, never the simple average of the two speeds when the distances are equal. Out: 40 km at 30 km/h takes $40/30 = 4/3$ hours. Back: 40 km at 20 km/h takes $40/20 = 2$ hours. Total distance = 80 km; total time = $4/3 + 2 = 10/3$ hours. Average speed = $80 / (10/3) = 80 \times 3/10 = 24 \text{ km/h}$, so option B is correct. This equals the harmonic mean $2 \times 30 \times 20 / (30 + 20) = 1200 / 50 = 24 \text{ km/h}$. Option A, 25 km/h, is the arithmetic mean $(30 + 20)/2$ — the classic error, because more time is spent at the slower speed, pulling the true average below the midpoint. Options C (26) and D (27) are further-inflated wrong averages. For equal distances at two speeds, always use total distance over total time, which gives the harmonic mean, here 24 km/h.

Examiner's note — the trap: Option A (25) is the signature trap — the arithmetic mean of 30 and 20. Equal distances mean more time at the slower leg, so the correct average (harmonic mean) is below 25, namely 24 km/h.

Q25 **C** Time-speed-distance — head-start / handicap race **HARD**

Runner A must cover the full 1000 m at 10 m/s, taking $1000 / 10 = 100$ seconds. Runner B starts 150 m ahead, so B has only $1000 - 150 = 850$ m left to run, at 8 m/s, needing $850 / 8 = 106.25$ seconds. Since 100 s is less than 106.25 s, A finishes first. To find the margin, see where B is when A finishes at $t = 100 \text{ s}$: B has run $8 \times 100 = 800$ m from his starting point, which is 150 m ahead of the line, so B has reached $150 + 800 = 950$ m along the track. He is therefore $1000 - 950 = 50$ m from the finish when A wins, so A wins by 50 m — option C is correct. Option A wrongly makes B the winner. Option B claims a dead heat, ignoring that A still finishes 6.25 s earlier. Option D, 25 m, halves the true margin through an arithmetic slip. The method: compare finish times, then locate the loser at the winner's finish instant.

Examiner's note — the trap: The trap is treating the 150 m head start as decisive for B; compute both finish times (A: 100 s, B: 106.25 s). A is faster enough to win, and at $t = 100 \text{ s}$ B sits at the 950 m mark, so A wins by 50 m.

RAPID FIRE — ANSWERS

1. Consumer Protection Act, 2019 — section defining 'deficiency'? — **Section 2(11)**

2. 'Audi alteram partem' means? — **Hear the other side**

3. Area of a circle of radius r ? — **πr^2**

4. Speed if 150 m covered in 12 s? — **12.5 m/s**