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What is the approximate average cost of each ball?



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Student	English	Science	hindi	Mathe- matics	Social- science
А	65	45	42	30	66
В	40	38	58	50	45
С	57	54	50	48	44
D	34	60	47	64	32
E	50	40	55	35	62

	N. Vinaykumar Reddy	value of $X - Y$?		total marks obtained by them in	(a) 1560 (b) 1484
	Director, IACE,	(a) 280 (b) 300 (c) 320 (d) 400 (e) 480		Social Science? (a) 14 (b) 10 (c) 12	(c) 1512 (d) 1578
	Hyderabad.	5. Monthly income of A and B are		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	18. 4, 16, 36, 66, 108, ?
MA	and the second	in the ratio 2 : 3 respectively. A	POs, Clerks	<i>Directions (Q. No. 11-15) : What</i>	(a) 172 (b) 190 (c) 164
		started a business by investing	Ouantitative Aptitude	value will come in place of question	(d) 126 (e) 136
	MODEL QUESTIONS	80% of his monthly income and	Snecial	mark (?) in the following question?	19. 5, 5, 10, 15, 25, 40, ?
1	A hag contains 12 red 15 green	investing 60% of his monthly	Also useful for	11. $\sqrt{1225} + ? = 2\frac{1}{6}$ of 102	$\begin{array}{c} (a) 137 \\ (b) 147 \\ (c) 103 \\ (d) 121 \\ (e) 65 \end{array}$
•	and 23 blue balls such that cost	income. What will be the ratio of	Other Competitive Exams	(a) 195 (b) 186 (c) 177	20. 7200, 1200, 240, 60, 20, ?
	of each red ball is Rs. 24, cost of	profit received by A and B after		(d) 175 (e) 176	(a) 50 (b) 34 (c) 30
	each green ball is Rs. 38 and cost	one year partnership?		12. $\frac{73}{224}$ $\frac{96}{124}$?=15	(d) 10 (e) 46
	of each blue ball is Rs. 27. What	(a) $3:2$ (b) $5:4$ (c) $6:5$ (d) $4:3$ (e) $8:7$	(d) $4:5$ (e) $2:3$ 7 Total marks obtained by D and E	384 584 (a) 480 (b) 466 (c) 488	Directions (Q.No. 21-25) : What approximate value should come in
	of each ball?	Directions (O. No. 6-10) : Study	taken together in Hindi are appr-	$\begin{array}{c} (a) 480 \\ (b) 400 \\ (c) 488 \\ (c) 494 \end{array}$	place of the question mark (?) in th
	(a) Rs. 24 (b) Rs. 30 (c) Rs. 22	the following information carefully	oximately what percent more-	13 $3\overline{125} + 3\overline{4006} + 3\overline{27} - 2$	following question? (Note : You ar
	(d) Rs. 26 (e) Rs. 28	and answer the related questions	/less than total marks obtained by	13. $\sqrt{123} + \sqrt{4090} - \sqrt{27} = ?$	not expected to calculate the exact
2.	A mixture contains 25% liquid A,	Following table represents the	them in Science? (a) 4% (b) 2% (c) 6%	(a) 15 (b) 18 (c) 25 (d) 17 (a) 11	value) 21 $40.96 \times 1.012 \times 1.210 = 2$
	auantity of liquid C. If the	obtained by five students.	(a) 4% (b) 2% (c) 0% (d) 10% (e) 8%		(a) 58 (b) 50 (c) 45 (d) 40
	difference between quantities of	Maximum marks in each subject	8. What is the average of marks	14. $\sqrt{225} + \sqrt{1600} - \sqrt{9025} = ?$	(e) Cannot be determined
	liquid A and C is 36 liters, then	= 80	obtained by all given students	(a) -34 (b) -46 (c) -40	22. 617+6.0117+0.6117+6.00117=
	find the quantity of mixture (a) 150 (b) 200 (c) 250	Student English Science hindi Mathe- Social- matics science	taken together in Mathematics?	(d) -47 (e) -32 15 $220.07 \times 220.53 = 2$	(a) 630 (b) 620 (c) 625 (d) 600 (e) Nore of these
	(a) 150 (b) 200 (c) 250 (d) 300 (e) 175	A 65 45 42 30 66	(a) 41.4 (b) 42.4 (c) 45.4 (d) 44.4 (e) 45.4	15. $32^{\text{cloc}} \times 32^{\text{cloc}} = ?$ (a) 1 (b) 8 (c) 2	(d) 600 (e) None of these 23. $8787 \div 77 \times 92 = 2 \times 14$
3.	The ratio of the length and diago-	B 40 38 58 50 45 C 57 54 50 48 44	9. What is the overall percentage	$\begin{array}{cccc} (a) & 1 & (b) & 0 & (c) & 2 \\ (d) & 4 & (e) & 16 \end{array}$	(a) 720 (b) 780 (c) 840
	nal of a rectangle is 4 : 5. If the	D 34 60 47 64 32	marks obtained by C in all given		(d) 810 (e) 750
	area of the rectangle is 108 cm ² ,	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	subjects taken together?	Directions (Q. no. 16-20) : Find	24. $\sqrt{5089} - \sqrt{2641} + \sqrt{1186} = ?$
	(a) 36 cm (b) 38 cm (c) 40 cm	o. What is the ratio of total marks obtained by E in English and	(a) 60.25% (b) 61.25% (c) 62.25% (d) 63.25%	<i>the next term in the series.</i> 16 17 68 340 2040 14280 2	(a) 54 (b) 90 (c) 40
	(d) 42 cm (e) 44 cm	Science taken together to the	(e) 64.25% (d) 05.25%	(a) 27150 (b) 114240	$\begin{array}{cccc} (a) & 54 & (b) & 50 & (c) & 40 \\ (d) & 20 & (e) & 30 \end{array}$
4.	75% of 60% of X is 335 more	total marks obtained by A in	10. What is the difference between	(c) 18680 (d) 48980	25. 4497× 1204 ÷ 1795 – 2337 = ?
	than 25% of 20% of Y. If the ratio	Hindi and Social taken together?	total marks obtained by B, C and	(e) 70310	(a) 660 (b) 700 (c) 950
_	of X to Y is 8 : 5, what is the	(a) $5:6$ (b) $3:4$ (c) $6:7$	D taken together in English and	17. 1899, 1778, 1678, 1597, 1533, ?	(d) 850 (e) 1000
1	Solutions b •Total balls = $12 \pm 15 \pm 23 = 50$	So, $\left(\frac{75}{100}\right) \left(\frac{60}{100}\right) 8K - \left(\frac{25}{100}\right)$	8. e; Average of marks obtained by all given students taken together in Mathematics	Since, $32^{1/5} = 2$, $? = 2^3 = 8$ 16. b; pattern is as follows: $17 \times 4 = 68 \implies 68 \times 5 = 340$	$\Rightarrow \left(\frac{8787}{77}\right) 92 = ? 14$
1	Total price = $24 \times 12 + 38 \times 15$ + $27 \times 23 = \text{Rs} \cdot 1479$	$\frac{20}{100} 5K = 335$	$=\frac{(30+50+48+64+35)}{5}=45.4$	$340 \times 6 = 2040$ $2040 \times 7 = 14280$	$\Rightarrow ? \approx \frac{(8787 92)}{(77 14)} \Rightarrow ? \approx 750$
	Average cost of each ball	\Rightarrow 3.6 K - 0.25K = 355	9. d; Total maximum marks	$14280 \times 8 = 114240$	24. a; Using approximation
	$=\frac{1479}{1}$ = Rs.29.58	\Rightarrow 3.35K = 335 \Rightarrow K = 100	$= 5 \times 80 = 400$	17. b; The pattern is as follows	$\sqrt{5089} - \sqrt{2641} + \sqrt{1186}$
	50	So, $X-Y = 3K = 300$	Total marks obtained by C -57 + 54 + 50 + 48 + 44 - 253	$1899 - 11^2 = 1778$ $1778 - 10^2 = 1678$	
2	b: Let the quantity of mixture	income of A and B respectively.	= 57 + 54 + 50 + 48 + 44 = 255 Therefore, percentage	$1678 - 9^2 = 1597$	$\approx \sqrt{4900} - \sqrt{2500} + \sqrt{1156}$
	= a liters	Investment of $A = 80\%$ of 2a	$=\left(\frac{253}{100}\right)$ 100 = 63 25%	$1597 - 8^2 = 1533$	= 70 - 50 + 34 = 54
	Quantity of liquid A	= 8a/5	$\left(400\right)^{100}$ obtained in the property of the second se	$1533 - 7^2 = 1484$	$\therefore \sqrt{5089} - \sqrt{2641} + \sqrt{1156} = 54$
	= 25% of a = 0.25 a Quantity of liquid B	Investment of $B = 60\%$ of 3a - $0a/5$	10. b ; Total marks obtained by B, C and D taken together in English	18. c; The pattern is as follows $4 \pm (3 \times 4) = 16$	25 a. Follow BODMAS rule to
	= 32% of a = $0.32a$	A's period of investment	= 40 + 57 + 34 = 131	$16 + (4 \times 5) = 36$	solve this question, as per the
	Quantity of liquid C	= 12 months	Total marks obtained by B, C	$36 + (5 \times 6) = 66$	order given below,
	= a - 0.25 - 0.32 = 0.43a	B's period of investment	and D taken together in Social	$66 + (6 \times 7) = 108$	Step - 1 - Parts of an equation
	Then, $0.43a - 0.25a = 36$ A= 200 liters	= 12 - 4 = 8 months Profit ratio	Science = $45 + 44 + 32 = 121$ Difference = $131 - 121 = 10$	$108 + (7 \times 8) = 164$ 19. e: The pattern is as follows	enclosed in Brackets' must be solved first and in the bracket
3	d; Let the length and breadth	A $p = 12 \left(\frac{8a}{8a}\right) \cdot 8 \left(\frac{9a}{8a}\right) = 4 \cdot 3$	11 b: $2 = 102 \left(\frac{13}{12}\right) = \sqrt{1225}$	5 + 5 = 10	the BODMAS rule must be
	of the rectangle be 'I' cm and 'b'	$A: \mathbf{D} = 12 \left(5 \right)^{10} \left(5 \right)^{110}$	11. D ; $1 = 102$ ($\overline{6}$) $\sqrt{1223}$	$5 + 10 = 15 \Longrightarrow 10 + 15 = 25$	followed,
	cm respectively	6. a; Total marks obtained by E in	$= 17 \times 13 - 35 = 221 - 35 = 186$	$15 + 25 = 40 \implies 25 + 40 = 65$	Step - 2 - Any mathematical 'Of' or
	Given $\frac{l}{\sqrt{l^2 + b^2}} = \frac{4}{5}$	English and Science taken together = $50 \pm 40 = 90$	12. a; $? = \frac{(15 - 564 - 564)}{(73 - 96)}$	20. d; The pattern is as follows $7200 \div 6 = 1200$	Sten - 3 - Next the parts of the
	$ l^2 l^2 l^2 + b^2 25 $	Total marks obtained by A in	$-15\left(\frac{584}{284}\right)\left(\frac{384}{284}\right) - 1584 - 480$	$1200 \div 5 = 240 \Rightarrow 240 \div 4 = 60$	equation that contain 'Division'
	$\rightarrow \frac{l^2 + b^2}{l^2 + b^2} - \frac{l^2}{25} \rightarrow \frac{l^2}{l^2} - \frac{l^2}{16}$	Hindi and Social Science taken	$\begin{array}{c} -13 \\ (73 \end{array}) (96) \begin{array}{c} -13 \\ 96 \end{array}) $	$60 \div 3 = 20 \Rightarrow 20 \div 2 = 10$	and 'Multiplication' are
	$1 + \left(\frac{b^2}{r^2}\right) = \frac{25}{16} \implies \left(\frac{b}{r}\right)^2 = \frac{25}{16} - 1$	together = $42 + 66 = 108$	13. b; $5^3 = 125$, $16^3 = 4096$, $3^3 = 27$	21. b ; $40.96 \times 1.012 \times 1.210 = ?$	calculated,
	$\binom{l^2}{(h)^2}$ 16 $\binom{l}{l}$ 16 $\binom{l}{b}$ 16	Katio = 90 : 108 = 5 : 6 7. b . Total marks obtained by D	$? = \sqrt[3]{125} + \sqrt[3]{4096} - \sqrt[3]{27}$	Here, $40.96 \approx 41$ 1 012 $\approx 1 \rightarrow 1210 \sim 12$	Step - 4 -the parts of the equation that contain 'Addition'
	$\Rightarrow \left(\frac{b}{l}\right) = \frac{b}{16} \Rightarrow \frac{b}{l} = \frac{b}{4}$	and E taken together in Hindi	= 5 + 16 - 3 = 18	Now, the expression will become	and 'Subtraction' should be
	Let $b = 3k$ and $l = 4k$	= 47 + 55 = 102	14. c; $15^2 = 225$, $40^2 = 1600$, 95^2	$41 \times 1 \times 1.2 \approx ?$	calculated. Given expression is,
	Also, $lb = 108$	Total marks obtained by D and	= 9025	$\Rightarrow ? \approx 49.2 \approx 50$	$4497 \times 1204 \div 1795 - 2337 = ?$
	$\Rightarrow 12k^2 = 108 \Rightarrow k^2 = 9$ $\Rightarrow k - 3$	E taken together in Science = $60 \pm 40 = 100$	$? = \sqrt{225} + \sqrt{1600} - \sqrt{9025}$	22. a; $617 + 6.0117 + 0.6117 + 6.00117 - 2$	Using approx, $4500 \times (1200 \div 1800) = 2340 = 2$
	Perimeter = $2(3k+4k)$	Difference = 102 - 100 = 2	= 15 + 40 - 95 = -40	$\Rightarrow ? = 629.62457 \approx 630$	4500 < (2/3) - 2340 = ?
	= 2(21) = 42 cm	Percentage $-\left(\frac{2}{2}\right)$ 100 = 2%	15. b; $? = 32^{(0.07+0.53)}$	23. e;	$3000 - 2340 = ? \implies 660 = ?$
4	b; Let X = 8K and Y = 5K	$1 \text{ creentage} = \left(\frac{100}{100}\right)^{-100-270}$	$= 32^{0.60} = 32^{3/5}$	$8787 \div 77 \times 92 = ? \times 14$	∴ ? = 660

	N. Vinaykumar Reddy	value of $X - Y$?		total marks obtained by them in	(a) 1560 (b) 1484
	Director, IACE,	(a) 280 (b) 300 (c) 320 (d) 400 (e) 480	RANK	Social Science? (a) 14 (b) 10 (c) 12	(c) 1512 (d) 1578
	Hvderabad.	(d) 400 (e) 400 5 Monthly income of A and B are		$\begin{array}{cccccccccccccccccccccccccccccccccccc$	18 <i>A</i> 16 36 66 108 2
114		in the ratio $2 \cdot 3$ respectively A	POs. Clerks	$\begin{array}{c} (0) 10 \\ \hline \\ \textbf{Directions} (O \ No \ 11-15) \cdot What \end{array}$	(a) 172 (b) 190 (c) 164
VILLE		started a business by investing		value will come in place of auestion	$\begin{array}{c} (d) 172 \\ (d) 126 \\ (e) 136 \\ \end{array}$
	MODEL QUESTIONS	80% of his monthly income and	Quantitative Aptitude	mark (?) in the following question?	19. 5, 5, 10, 15, 25, 40, ?
_	C	after 4 months B joined him by	Special	$11 \sqrt{1205} + 2 = 2^{1} (102)$	(a) 137 (b) 147 (c) 163
1.	A bag contains 12 red, 15 green	investing 60% of his monthly	Also useful for	11. $\sqrt{1225 + ?} = 2 - \text{of } 102$	(d) 121 (e) 65
	and 23 blue balls such that cost	income. What will be the ratio of	Other Competitive Exams	(a) 195 (b) 186 (c) 177	20. 7200, 1200, 240, 60, 20, ?
	of each red ball is Rs. 24, cost of	profit received by A and B after		(d) 175 (e) 176	(a) 50 (b) 34 (c) 30
	each green ball is Rs. 38 and cost	one year partnership?		12 73 96 $2-15$	(d) 10 (e) 46
	of each blue ball is Rs. 27. What	(a) 3 : 2 (b) 5 : 4 (c) 6 : 5	(d) 4 : 5 (e) 2 : 3	12. $\overline{384}$ $\overline{584}$ $7-15$	Directions (Q.No. 21-25) : What
	is the approximate average cost	(d) 4 : 3 (e) 8 : 7	7. Total marks obtained by D and E	(a) 480 (b) 466 (c) 488	approximate value should come in
	of each ball?	Directions (Q. No. 6-10) : Study	taken together in Hindi are appr-	(d) 468 (e) 494	place of the question mark (?) in th
	(a) Rs. 24 (b) Rs. 30 (c) Rs. 22	the following information carefully	oximately what percent more-	13 $3\overline{125} + 3\overline{4006} + 3\overline{27} = 2$	following question? (Note : You ar
	(d) Rs. 26 (e) Rs. 28	and answer the related questions	/less than total marks obtained by	13. $\sqrt{123} + \sqrt{4090} - \sqrt{27} = ?$	not expected to calculate the exac
2.	A mixture contains 25% liquid A,	Following table represents the	them in Science?	(a) 15 (b) 18 (c) 25	value)
	32% liquid B and remaining	data regarding number of marks	(a) 4% (b) 2% (c) 6%	(d) 17 (e) 11	21. 40.96 × 1.012× 1.210 = ?
	quantity of liquid C. If the	obtained by five students.	(d) 10% (e) 8%	14. $\sqrt{225} + \sqrt{1600} - \sqrt{9025} = ?$	(a) 58 (b) 50 (c) 45 (d) 40
	difference between quantities of	Maximum marks in each subject	8. What is the average of marks		(e) Cannot be determined
	liquid A and C is 36 liters, then	= 80	obtained by all given students	(a) -34 (b) -46 (c) -40	22. 617+6.0117+0.6117+6.00117=
	find the quantity of mixture	Student English Science hindi Mathe- Social-	taken together in Mathematics?	(d) -47 (e) -32	(a) 630 (b) 620 (c) 625
	(a) 150 (b) 200 (c) 250	A 65 45 42 30 66	(a) 41.4 (b) 42.4 (c) 43.4	15. $32^{0.07} \times 32^{0.55} = ?$	(d) 600 (e) None of these
3	(d) 300 (e) 175	A 000 40 40 40 58 50 45	(d) 44.4 (e) 45.4	(a) 1 (b) 8 (c) 2 (c) 16	23. $8/8/\div 7/\times 92 = ? \times 14$
3.	The ratio of the length and diago-	C 57 54 50 48 44	9. What is the overall percentage	(d) 4 (e) 16	(a) 720 (b) 780 (c) 840
	nal of a rectangle is $4:5$. If the	D 34 60 47 64 32 F 50 40 55 35 62	marks obtained by C in all given	\mathbf{D} is a final $(\mathbf{O} + \mathbf{n} + \mathbf{I}(\mathbf{D})) + \mathbf{E}$ is d	(d) 810 (e) 750
	area of the rectangle is 108 cm ² ,	6 What is the ratio of total marks	subjects taken together?	Directions (Q. no. 10-20) : Fina	24. $\sqrt{5089} - \sqrt{2641} + \sqrt{1186} = ?$
	what is its perimeter? (a) 26 cm (b) 28 cm (c) 40 cm	o. what is the ratio of total marks	(a) 60.25% (b) 61.25%	$\begin{array}{c} \text{ine next term in the series.} \\ 16 17 68 240 2040 14280 2 \end{array}$	(a) 54 (b) 00 (c) 40
	(a) 30 cm (b) 38 cm (c) 40 cm (d) 42 cm (e) 44 cm	Science taken together to the	(c) 02.25% (u) 05.25%	10. 17, 08, 540, 2040, 14280, (2) 27150 (b) 11/2/0	$\begin{array}{c} (a) \ 54 \\ (b) \ 90 \\ (c) \ 40 \\ (d) \ 20 \\ (e) \ 30 \\ \end{array}$
4	(0) 42 cm (c) 44 cm 75% of 60% of X is 335 more	total marks obtained by Δ in	10 What is the difference between	$\begin{array}{c} (a) \ 27130 \\ (b) \ 114240 \\ (c) \ 18680 \\ (d) \ 48980 \\ \end{array}$	(0) 20 (c) 30 25 $4497 \times 1204 \div 1795 - 2337 - 2$
т.	than 25% of 20% of Y. If the ratio	Hindi and Social taken together?	total marks obtained by B C and	(e) 70310	(a) 660 (b) 700 (c) 950
	of X to Y is $8 \cdot 5$ what is the	(a) $5 \cdot 6$ (b) $3 \cdot 4$ (c) $6 \cdot 7$	D taken together in English and	17 , 1899 1778 1678 1597 1533 ?	$\begin{array}{c} (a) 850 \\ (b) 700 \\ (c) 500 \\$
_		(u) = (v)	D taken together in English and	111 10, 11, 10, 10, 10, 10, 10, 10, 10,	(4) 000 (0) 1000
	Colutions		8. e; Average of marks obtained	Since, $32^{1/5} = 2$, $? = 2^3 = 8$	
	Solutions	$S_{0}\left(\frac{75}{100}\right)\left(\frac{60}{100}\right)_{8K}\left(\frac{25}{100}\right)$	by all given students taken	16. b; pattern is as follows:	$\rightarrow \left(\frac{8787}{92-2}\right) 92-2 14$
1	b; Total balls = 12 +15 +23 =50	So, (100) (100) or (100)	together in Mathematics	$17 \times 4 = 68 \implies 68 \times 5 = 340$	$\rightarrow \left(\begin{array}{c} 77 \end{array} \right) \begin{array}{c} 92 = 1 \\ 14 \end{array}$
	Total price = $24 \times 12 + 38 \times 15$	$\frac{20}{5}$ 5K = 335	$-\frac{(30+50+48+64+35)}{454}$	$340 \times 6 = 2040$	$\Rightarrow 2 \approx \frac{(8787 92)}{2} \Rightarrow 2 \approx 750$
	$+27 \times 23 = \text{Rs.} 1479$	100		$2040 \times 7 = 14280$	$(77 14) \xrightarrow{\gamma} \gamma \sim \gamma 50$
	Average cost of each ball	\Rightarrow 3.6 K - 0.25K = 355	9. d; Total maximum marks	$14280 \times 8 = 114240$	24. a; Using approximation
	$=\frac{1479}{1000}$ = Rs.29.58	\Rightarrow 3.35K = 335 \Rightarrow K = 100	$= 5 \times 80 = 400$	17. b; The pattern is as follows	$\sqrt{5089} - \sqrt{2641} + \sqrt{1186}$
	50	So, $X - Y = 3K = 300$	Total marks obtained by C	$1899 - 11^2 = 1778$	
	(approximately 30)	5. d; Let 2a and 3a are monthly	= 57 + 54 + 50 + 48 + 44 = 253	$1778 - 10^2 = 1678$	$\sqrt{4000}$ $\sqrt{2500}$ $\sqrt{1156}$
2	b; Let the quantity of mixture	income of A and B respectively.	Therefore, percentage	$1678 - 9^2 = 1597$	$\approx \sqrt{4900} - \sqrt{2300} + \sqrt{1130}$
	= a liters	Investment of $A = 80\%$ of 2a	$=\left(\frac{253}{400}\right)$ 100 = 63.25%	$1597 - 8^2 = 1533$	= 70 - 50 + 34 = 54
	Quantity of liquid A	= 8a/5	$\left(\begin{array}{c}400\end{array}\right)$	$1533 - 7^2 = 1484$	$\therefore \sqrt{5089} - \sqrt{2641} + \sqrt{1156} = 54$
	= 25% of a = 0.25 a	Investment of $B = 60\%$ of 3a	10. b ; Iotal marks obtained by B, C	18. c; The pattern is as follows $1 < (2 + 4) = 1$	
	Quantity of liquid B = 22% of $a = 0.22a$	= 9a/5	and D taken together in English $-40 + 57 + 24 - 121$	$4 + (3 \times 4) = 16$ $16 + (4 \times 5) = 26$	25. a; Follow BODMAS rule to
	= 52% of a = 0.52a	-12 months	= 40 + 57 + 54 = 151 Total marks obtained by P. C.	$10 + (4 \times 3) = 30$ $26 + (5 \times 6) = 66$	solve uns question, as per the
	Quantity of figure C - 2 - 0.25 - 0.32 - 0.432	- 12 monuls B's period of investment	and D taken together in Social	$50 + (5 \times 0) = 00$ $66 + (6 \times 7) = 108$	Sten -1 - Parts of an equation
	= a - 0.23 - 0.32 = 0.43a Then $0.43a = 0.25a = 36$	-12 - 4 - 8	Science $= 45 \pm 44 \pm 32 = -121$	$108 + (7 \times 8) - 164$	enclosed in Brackets' must be
	A = 200 liters	$= 12^{\circ} + = 0$ months Profit ratio	Difference = $131 - 121 = 10$	19. e: The pattern is as follows	solved first and in the bracket
3	d: Let the length and breadth	$12 (8a) \cdot 8 (9a) - 4 \cdot 2$	11 102 (13) 1227	5 + 5 = 10	the BODMAS rule must be
-	of the rectangle be 'I' cm and 'b'	A: B = $\frac{12}{5} \left(\frac{-5}{5}\right)^{10} \left(\frac{-5}{5}\right)^{-4.5}$	11. b; $? = 102 \left(\frac{-6}{6} \right) - \sqrt{1225}$	$5 + 10 = 15 \implies 10 + 15 = 25$	followed.
	cm respectively	6. a; Total marks obtained by E in	$= 17 \times 13 - 35 = 221 - 35 = 186$	$15 + 25 = 40 \implies 25 + 40 = 65$	Step - 2 - Any mathematical 'Of' or
	$l = \frac{l}{4}$	English and Science taken	12 $a^{2} = \frac{(15 \ 584 \ 384)}{a^{2}}$	20. d; The pattern is as follows	'Exponent' must be solved next,
	Given $\sqrt{l^2 + b^2}$ 5	together = 50 + 40 = 90	12. $a; = (73 \ 96)$	$7200 \div 6 = 1200$	Step - 3 - Next, the parts of the
	$\rightarrow \frac{l^2}{l^2} = \frac{16}{16} \rightarrow \frac{l^2 + b^2}{l^2 + b^2} = \frac{25}{16}$	Total marks obtained by A in	$=15 \left(\frac{584}{2}\right) \left(\frac{384}{2}\right) = 15 8 4 = 480$	$1200 \div 5 = 240 \Rightarrow 240 \div 4 = 60$	equation that contain 'Division'
	$\rightarrow \frac{l^2}{l^2 + b^2} - \frac{l^2}{25} \rightarrow \frac{l^2}{l^2} - \frac{l^2}{16}$	Hindi and Social Science taken	$\left(\begin{array}{c}73\end{array}\right)\left(\begin{array}{c}96\end{array}\right)$	$60 \div 3 = 20 \Rightarrow 20 \div 2 = 10$	and 'Multiplication' are
	$\left + \left(\frac{b^2}{b} \right) \right = \frac{25}{25} \rightarrow \left(\frac{b}{b} \right)^2 - \frac{25}{10} = 1$	together = 42 + 66 = 108	13. b; $5^3 = 125$, $16^3 = 4096$, $3^3 = 27$	21. b ; 40.96 × 1.012 × 1.210 = ?	calculated,
	$\left(l^2\right)^- 16 \overline{\left(l\right)}^- \overline{16}^{-1}$	Ratio = 90 : 108 = 5 : 6	$? = \sqrt[3]{125} + \sqrt[3]{4096} - \sqrt[3]{27}$	Here, $40.96 \approx 41$	Step - 4 - the parts of the
	$\Rightarrow \left(\frac{b}{b}\right)^2 = \frac{9}{2} \Rightarrow \frac{b}{2} = \frac{3}{2}$	7. b; Total marks obtained by D		$1.012 \approx 1 \Rightarrow 1.210 \approx 1.2$	equation that contain 'Addition'
	$-\left(l\right)$ $-\frac{16}{16}$ l 4	and E taken together in Hindi	= 5 + 16 - 3 = 18	Now, the expression will become	and 'Subtraction' should be
	Let $b = 3k$ and $l = 4k$	= 47 + 55 = 102	14. c; $15^2 = 225$, $40^2 = 1600$, 95^2	$41 \times 1 \times 1.2 \approx ?$	calculated. Given expression is,
	Also, $lb = 108$	Total marks obtained by D and	= 9025	\Rightarrow ? \approx 49.2 \approx 50	$4497 \times 1204 \div 1795 - 2337 = ?$
	$\Rightarrow 12k^2 = 108 \Rightarrow k^2 = 9$	E taken together in Science	$? = \sqrt{225} + \sqrt{1600} - \sqrt{9025}$	22. a ; $617 + 6.0117 + 0.6117 + 0.00117 +$	Using approx, $4500 \times (1200 \div$
	$\Rightarrow K = 3$	= 60 + 40 = 100	15 . 40 05 40	0.0011 / = ?	(1800) - 2340 = ?
	Perimeter = $2(3K+4K)$ = $2(21) = 42$ are	Difference = $102 - 100 = 2$	= 13 + 40 - 93 = -40 15 h: $2 - 22(0.07+0.53)$	$\Rightarrow ! = 029.0243 / \approx 030$	4300 < (2/3) - 2340 = ?
A	= 2(21) = 42 cm b. L at $\mathbf{V} = 9V$ and $\mathbf{V} = 5V$	Percentage = $\left \frac{2}{100}\right $ 100 = 2%	13. U; $! = 32^{(0.0710.33)}$ - 200.60 - 203/5	23. e_{i}	$3000 - 2340 = ? \implies 660 = ?$
4	$\mathbf{U}, \mathbf{LC} \mathbf{I} \mathbf{A} = \mathbf{O} \mathbf{K} \text{ and } \mathbf{I} = \mathbf{J} \mathbf{K}$		$-32^{-32^{-1}}=32^{-1}$	$0/0/ - 1/ \times 92 = 1 \times 14$: -000

	(a) 1560	(b) 14	84
	(c) 1512	(d) 15	578
	(e) 1564		
8.	4, 16, 36, 6	56, 108, ?	
	(a) 172	(b) 190	(c) 164
	(d) 126	(e) 136	
9.	5, 5, 10, 15	5, 25, 40, ?	
	(a) 137	(b) 147	(c) 163
	(d) 121	(e) 65	
20.	7200, 1200), 240, 60, 2	20, ?
	(a) 50	(b) 34	(c) 30
	(d) 10	(e) 46	
	Directions	(Q.No. 21-	-25) : What
pp	proximate v	value shou	ld come in
la	ce of the qu	estion mar	k (?) in the
oll	lowing ques	stion? (Not	e : You are
		``	
ot	expected i	to calculate	e the exact
ot ali	expected i ue)	to calculate	e the exact
ot ali 21.	<i>expected i</i> <i>ue)</i> 40.96 × 1.0	to calculate	e the exact
ot al 21.	<i>expected i</i> <i>ue</i>) 40.96 × 1.0 (a) 58 (b)	to calculate 012× 1.210) 50 (c) 4	e the exact = ? -5 (d) 40
ot al 21.	<i>expected i</i> <i>ue</i>) 40.96 × 1.0 (a) 58 (b) (e) Cannot	to calculate 012× 1.210) 50 (c) 4 be determi	e the exact = ? 5 (d) 40 ined
22.	<i>expected i</i> <i>ue</i>) 40.96 × 1.0 (a) 58 (b) (e) Cannot 617+6.011	to calculate 012× 1.210) 50 (c) 4 be determi 7+0.6117 +	e the exact = ? -5 (d) 40 ined -6.00117= ?
ot ali 21. 22.	$\begin{array}{c} expected i \\ ue) \\ 40.96 \times 1.0 \\ (a) 58 (b) \\ (e) Cannot \\ 617+6.011 \\ (a) 630 \end{array}$	to calculate 012× 1.210) 50 (c) 4 be determin 7+0.6117 + (b) 620	e the exact = ? -5 (d) 40 ined -6.00117= ? (c) 625
not vali 21. 22.	$\begin{array}{c} expected i \\ ue) \\ 40.96 \times 1.0 \\ (a) 58 (b) \\ (e) Cannot \\ 617+6.011 \\ (a) 630 \\ (d) 600 \end{array}$	to calculate 012× 1.210) 50 (c) 4 be determin 7+0.6117 + (b) 620 (e) None c	e the exact = ? 5 (d) 40 ined 6.00117=? (c) 625 of these
not vali 21. 22.	$\begin{array}{c} expected i \\ ue) \\ 40.96 \times 1.0 \\ (a) 58 (b) \\ (e) Cannot \\ 617+6.011 \\ (a) 630 \\ (d) 600 \\ 8787\div 77\times \end{array}$	to calculate 0.12×1.210 0.50 (c) 4 be determine 7+0.6117 + (b) 620 (e) None co 1.22×10^{-1}	e the exact = ? 5 (d) 40 ined 6.00117=? (c) 625 of these 4
not vali 21. 22.	$\begin{array}{c} expected \ a \\ ue) \\ 40.96 \times 1.0 \\ (a) 58 (b) \\ (e) \ Cannot \\ 617+6.011 \\ (a) 630 \\ (d) 600 \\ 8787 \div 77 \times \\ (a) 720 \end{array}$	to calculate 0.12×1.210 0.50 (c) 4 be determine 7+0.6117 + (b) 620 (e) None co $1.92 = ? \times 1$ (b) 780	e the exact = ? 5 (d) 40 ined 6.00117=? (c) 625 of these 4 (c) 840
22.	$\begin{array}{c} expected \ a\\ ue)\\ 40.96 \times 1.0\\ (a) 58 (b)\\ (e) \ Cannot\\ 617+6.011\\ (a) 630\\ (d) 600\\ 8787\div 77\times\\ (a) 720\\ (d) 810 \end{array}$	to calculate 012×1.210 012×1.210 050 (c) 4 be determine 7+0.6117 + (b) 620 (e) None constraints $92 = ? \times 1$ (b) 780 (e) 750	e the exact = ? 5 (d) 40 ined 6.00117=? (c) 625 of these 4 (c) 840
21. 22. 23.	expected a(ue)(a) 58 (b)(a) 58 (b)(b) Cannot(c) Cannot(c) Cannot(c) Cannot(c) 630(c) 630(c) 6008787÷77×(c) 720(c) 810	to calculate 0.12×1.210 0.50 (c) 4 be determined 7+0.6117 + (b) 620 (e) None (c) $92 = ? \times 1$ (b) 780 (e) 750	e the exact = ? 5 (d) 40 ined 6.00117=? (c) 625 of these 4 (c) 840
22. 23.	expected is 40.96×1.0 (a) 58 (b) (b) Cannot 617+6.011 (a) 630 (d) 600 $8787\div 77\times$ (a) 720 (d) 810 $\sqrt{5089} - \sqrt{2}$	to calculate 0.12×1.210 0.50 (c) 4 be determined 7+0.6117 + (b) 620 (e) None (c) $92 = ? \times 1$ (b) 780 (e) 750 $\overline{641} + \sqrt{1186}$	e the exact = ? 5 (d) 40 ined 6.00117=? (c) 625 of these 4 (c) 840 =?

