MIZORAM LEGISLATIVE ASSEMBLY COMPETITIVE EXAMINATION FOR DIRECT RECRUITMENT FOR THE POST OF UPPER DIVISION CLERK - MAY, 2023

PAPER - II (ARITHMETICS)

Time	:	3	hours
Full Marke		4	<u>۱</u>

The figures in the margin indicates full marks for the questions.

Choose the correct answer: (a). 15% of 20 is -									((3x1=3)
` '				3	(iii)	4	(iv)	5		
(b)			7x - 9 = (ii)	16 is -	(iii)	25 7	(iv)	7		
(c)	If 9: (i)	23::36: <i>x</i> , 86					(iv)	90		
Alfro	ed bu e sells	ys an old s the pho	mobile	phone for Rs. 5800. V	Rs. 4 What	4700 and is his ga	spends in perce	Rs. 8 nt?	800 on	its repair. (3)
(a)	$a^{2} +$	8a + 16	ving ex	pressions :					(2	2x2=4)
A courses	ontrac 4 pe	tor estima ersons ins	ates that stead of	3 persons three, how	could long s	l require hould the	a build ey take	ing is to cor	4 days. nplete	Then he the jobs?
2x -	+ 3 <i>y</i> =	= 13	:							(4)
gain	s two									
Sim	plify:	$(4\sqrt{3} - 6)$	√5) + ($(\sqrt{3}+\sqrt{5})$						(3)
				-	ed in 1	wo annua	al instaln	nents (of Rs. 6,	,000 each. (3)
	(a). (b) (c) Alfred if here is a second in the importance in th	(a). 15% (i) (b) The (i) (c) If 9: (i) Alfred bu If he sell: Factorise (a) $a^2 + b^2$ A contract uses 4 per Solve for $a^2 + b^2$ Solve for $a^2 + b^2$ Mawia talgains two ways? Simplify: An article	 (a). 15% of 20 is (i) 2 (b) The value of (i) 25 (c) If 9:23::36:x, (i) 86 Alfred buys an old If he sells the pho Factorise the follow (a) a² + 8a + 16 (b) 4p² - 9q² A contractor estimate uses 4 persons insumes 4 persons insumes	 (a). 15% of 20 is - (i) 2 (ii) (b) The value of 7x - 9 = (i) 25 (ii) (c) If 9:23::36:x, then th (i) 86 (ii) Alfred buys an old mobile of the sells the phone for the sells the sells the sells the sells the phone for the sells the sells	 (a). 15% of 20 is - (i) 2 (ii) 3 (b) The value of 7x - 9 = 16 is - (i) 25 (ii) 10/7 (c) If 9:23::36:x, then the value of (i) 86 (ii) 92 Alfred buys an old mobile phone for If he sells the phone for Rs. 5800. The sells the phone for Rs. 5800. The sells the following expressions: (a) a² + 8a + 16 (b) 4p² - 9q² A contractor estimates that 3 persons uses 4 persons instead of three, how Solve for x and y: 2x + 3y = 13 5x - 3y = 3 Mawia takes 8 hours to walk a certain pains two hours if he had covered be ways? Simplify: (4√3 - 6√5) + (√3 + √5) 	(a). 15% of 20 is - (i) 2 (ii) 3 (iii) (b) The value of $7x - 9 = 16$ is - (i) 25 (ii) $\frac{10}{7}$ (iii) (c) If 9:23::36:x, then the value of x is (i) 86 (ii) 92 (iii) Alfred buys an old mobile phone for Rs. If he sells the phone for Rs. 5800. What is Factorise the following expressions: (a) $a^2 + 8a + 16$ (b) $4p^2 - 9q^2$ A contractor estimates that 3 persons could uses 4 persons instead of three, how long solve for x and y: $2x + 3y = 13$ $5x - 3y = 3$ Mawia takes 8 hours to walk a certain place a gains two hours if he had covered both way ways? Simplify: $(4\sqrt{3} - 6\sqrt{5}) + (\sqrt{3} + \sqrt{5})$ An article cost Rs. 10,000. 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9.	A train running at a speed of 90 km/hr passes a pole on the platform in 18 see What is the length of the train?	conds. (3)
10.	A and B together can do a piece of work 'n'days while B alone can finish it in 'n What is the work done by A in 1 day?	n'days. (3)
11.	Express $\frac{x^2-4}{x^3-8}$ in the simplest form.	(3)
12.	What is 80 percent of 45?	(3)
13.	In an exam Sangi secured 332 marks. If she secured 83% marks. Find the maxim marks?	num (4)
14.	A shopkeeper takes 10% profit on his goods. He lost 20% of his goods during a What is his loss percent?	theft. (4)
15.	If Rs. 12 is divided between A and B such that the product of their shares is Rs. 3 the share of A and B?	32. Find (4)

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