

OSDAV Public School, Kaithal May Test ,2024 Class : X Subject : Mathematics

M.M. : 20

Time:35 Min General Instructions:-

<u> </u>	All questions are compulsory		
Q.No.	Questions	Marks	
Q1	If the HCF of two numbers is 2 and their product is 120, find their LCM.	1	
	(a) 60 (b) 40 (c)20 (d) 10		
Q2	If one zero of the quadratic polynomial x^2+3x+k is 2, then the value of k is	1	
	(a) 10 (b) -10 (c) 5 (d) -5		
Q3	The equations $5x+2y=6$ and $7x+5y=3$ has	1	
	(a)unique solution (b) No solution (c)infinitely many solution (d) none of these		
Q4	The sum of the exponents of the prime factors in the prime factorisation of 204 is	1	
	(a) 1 (b) 2 (c) 4 (d) 6		
Q5	If a pair of a linear Equation is inconsistent, then the lines will be	1	
	(a) parallel (b) always coincident		
	(c) intersecting or coincident (d) either parallel or intersecting		
Q6	The (HCF \times LCM) for the numbers 50 and 20 is	1	
	(a) 10 (b) 100 (c) 1000 (d) 50		
Q7	HCF of two prime numbers is :	1	
	(a) 0 (b) 1 (c) 2 (d) 3		
Q8	Sum of zeroes of polynomial x^2+5x+6 is	1	
	(a) 3 (b) 2 (c) -5 (d) -6		
Q9	Zeroes of the polynomial 4x ² -9 are	1	
	(a) $\frac{2}{3},-\frac{2}{3}$ (b) $\frac{3}{2},-\frac{3}{2}$ (c) $\frac{5}{2},-\frac{5}{2}$ (d) $\frac{7}{2},-\frac{7}{2}$		
Q10	The value of x and y if $3x + 4y = 5$ and $2x - 3y = 9$ are :	1	
	(a) 3,-1 (b) 2,-1 (c) -2,-1 (d) -2,1		
Q11	The number $7+3\sqrt{5}$ is	1	
	(a) natural number (b) Whole number (c) rational number (d) Irrational number		
Q12	For what value of b the point $(3,b)$ lies on the line reprinted by $2x-3y = 5$?	1	
	(a) $\frac{1}{2}$ (b) $\frac{1}{3}$ (c) $\frac{1}{5}$ (d) $\frac{1}{7}$		
Q13	The pair of equation x-y=0 and x+y=0 has	1	
	(a)unique solution (b) No solution (c)infinitely many solution (d) none of the above		
Q14	5 pencils and 10 pens together cost rupees 50 whereas 7 pencils and 5 pens together	1	
	cost Rs 46. If cost of one pen is rupees x and cost of one pencil is rupees y then		
	representation of the situation algebraically is		

	(a) $5x+10y=$	50, 7x+5y=46	(b) 5y+10×=	50, 7y+5x=46	
	(c) 5x-10y=	=50, 7x-5y=46	(d)5x+10y+50	0=0 7x+5y+46=0	
Q15	The total number of factors of a prime number is			1	
	(a)1	(b) 0	(c) 2	(d) 3	
Q16	Prime factor	rs of 98 are			1
	(a) 2×7 ³	(b) 3×7^{3}	(c)2×7 ²	$(d)2 \times 7^{5}$	
Q17	The LCM of two numbers is 740 and their HCF is 37. If one of the numbers is			1	
	185,then the	e other number is			
	(a) 136	(b) 140	(c) 142	(d) 148	
Q18	If a and b ar	e the zeroes of the qu	adratic polynomial x ² .	-5x+k such that a-b=1 then k=	1
	(a) 2	(b) 3	(c) 4	(d) 6	
Q19	Assertion : HCF (13,26)=1			1	
	Reason: If p,q are prime numbers ,then HCF(p,q)=1				
	a) Both Assertion and Reason are true and reason is correct explanation for the				
	assertion				
	b) Both Assertion and Reason are true but reason is not correct explanation for				
	assertion.				
	c) Assertion is true but reason is false.				
	d) Assertion is false but reason is true.				
Q20	Assertion: if the pair of lines are coincident then we say that it has infinitely many			1	
	solutions				
	Reason : If the pair of lines are parallel ,then the pair has no solution and it is called				
	inconsistent pair of equations				
	a) Both Ass	ertion and Reason are	true and reason is co	prrect explanation for the	
	assertion				
	b) Both Ass	ertion and Reason are	e true but reason is no	t correct explanation for	
	assertion.				
	c) Assertion	is true but reason is f	false.		
	d) Assertion	is false but reason is	true		



OSDAV Public School, Kaithal May Test ,2024 Class : X Subject : Mathematics

SET : B

M.M. : 20

Time: 35 Min General Instructions:-

I. All questions are compulsory.

Q.No.	Questions	Marks
Q1	If the HCF of two numbers is 3 and their product is 180, find their LCM.	1
_	(a) 60 (b) 40 (c) 20 (d) 10	
Q2	If one zero of the quadratic polynomial x^2-3x+k is 2, then the value of k is	1
	(a) 2 (b) -2 (c) 3 (d) -3	
Q3	The equations $x-2y=6$ and $3x+5y=3$ has	1
_	(a)unique solution (b) No solution (c)infinitely many solution (d) none of these	
Q4	The sum of the exponents of the prime factors in the prime factorisation of 98 is	1
_	(a) 1 (b) 2 (c) 3 (d) 4	
Q5	If a pair of a linear Equation is consistent, then the lines will be	1
	(a) parallel (b) always coincident (c) intersecting or coincident (d) either	
	parallel or intersecting	
Q6	The (HCF \times LCM) for the numbers 45 and 117 is	1
	(a) 5165 (b) 5265 (c) 3365 (d)3065	
Q7	HCF of two x^2y^2 and x^3y^2 :	1
	(a) x^2y^3 (b) x^6y^6 (c) xy (d) x^2y^2	
Q8	Sum of zeroes of polynomial x ² -x-6 is	1
0.0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Q9	Zeroes of the polynomial $9x^2$ -4 are	1
	(a) $\frac{1}{3}, \frac{1}{3}$ (b) $\frac{3}{2}, \frac{3}{2}$ (c) $\frac{5}{2}, \frac{5}{2}$ (d) $\frac{1}{2}, \frac{1}{2}$	
Q10	The value of x and y if $3x + 2y = 3$ and $2x - 3y = -11$ are :	1
011	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4
Q11	The number $1+3\sqrt{6}$ is	1
010	(a) natural number (b) Whole number (c) rational number (d) Irrational number	1
QIZ	For what value of b the point (2,b) lies on the line reprinted by $x-3y = 7$	1
012	$\frac{(a)}{2} = \frac{(b)}{3} = \frac{(c)}{5} = \frac{(a)}{5} = (a$	1
QIS	The pair of equation $x-y=4$ and $2x-2y=0$ has	1
014	5 pencils and 7 pens together cost rupees 70 whereas 7 pencils and pens together cost	1
V14	Rs 77 If cost of one pen is rupees x and cost of one pencil is rupees y then	1
	representation of the situation algebraically is	
	(a) $5x+7y=79$, $7x+5y=77$ (b) $5y+7\times=79$, $7y+5x=77$ (c) $5x-7y=77$, $7x-5y=79$	
	(d)5x+10y+50=07x+5y+46=0	
Q15	The zeroes of the quadratic polynomial $x^2 + 99x + 127$ are	1
-	(a)Both positive (b)both negative (c) one positive and one negative (d)	
	both equal	
Q16	Prime factors of 325 is	1
	(a) $5^2 \times 7$ (b) $5^2 \times 13$ (c) 5×13^2 (d) $2 \times 3^2 \times 5^2$	
Q17	HCF of 168 and 126 is	1
	(a) 21 (b) 42 (c) 14 (d) 18	
Q18	If a and b are the zeroes of the quadratic polynomial x^2-6x+2 , then $1/a+1/b$ is:	1
	(a) 3 (b) -3 (c) 12 (d) -12	
Q19	Assertion: HCF (5,25)=25	1
	Reason: If p,q are prime numbers ,then HCF(p,q)=1	

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OSDAV Public School, Kaithal Class :X

	ESTD. 1886	Subject : Mathematics	ANSWER KEY
Q.No.		Questions	Marks
1	a		1
2	b		1
3	a		1
4	с		1
5	a		1
6	с		1
7	b		1
8	с		1
9	b		1
10	a		1
11	d		1
12	b		1
13	a		1
14	b		1
15	с		1
16	c		1
17	d		1
18	d		1
19	d		1
20	b		1



OSDAV Public School, Kaithal

Class :X

Subject :Mathematics

SET B ANSWER KEY

Q.No.	Questions	Marks
1	a	1
2	a	1
3	a	1
4	c	1
5	c	1
6	b	1
7	d	1
8	d	1
9	a	1
10	d	1
11	d	1
12	d	1
13	b	1
14	b	1
15	b	1
16	b	1
17	b	1
18	a	1
19	d	1
20	b	1