

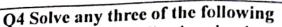
N.E.S. HIGH SCHOOL

	_			•	-	
Bhan	dup	(W),	Mumbai	-	400	078
Section 2 Section 2 in case of the last	STATE OF THE PERSON NAMED IN					

19	Bhandup (W), Mumbai – 400 078.	
	I Semester Examination	Roll No:
Std: X	Sub: Mathematics-I	Marks: 40
Date: 22/10/2018	No. of pages: 03	Time: 2Hrs.
Q1 A) Solve any four of	the following: olynomials: $x^3 - 2x^2 - 9,5x^3 + 2x + 9$	(4)
1. Add the given po	$\frac{1}{2} = \frac{1}{2} = \frac{1}$	
 Solve the equation (2,-1,0,5,6) is the form. 	e co-efficient form of the polynomial ep	resent it in index
4 Solve the follow	ing simultaneous equation: $x + y = 4.2x$	-5y = 1
5. If $A = \{1,3,9,11,1\}$	13 $\}$ and B= $\{1,9,11\}$ then find $A \cup B$ an	$dA \cap B$
6. Simplify: $7\sqrt{3}$ -	- 29√3	(4)
B. Solve any two of the	following:	(4)
1. The sum of the n	numerator and the denominator of a fraction more than twice the numerator. Find the	on is 15, 1 ne fraction.
denominator is 3	by $(x + 2)$ and write the answer in the for	orm of Dividend
2. Divide(2x + 2)	ient + Remainder	
3 Subtract: $5ah + 4$	4hc - 6ac from 3ab - 2bc + 5ac	
2. A) Choose the correc	t alternative from the given option and	l complete the (4)
sentences:		
a) 5% b) 12% c)	rage is 18% d) 28%	
2) The tenth term of A.P a) 44 b) 45 c) 46	2,7,12, · · · · is d) 47	
3) For $\sqrt{2}x^2 - 5x + \sqrt{2} =$	=0, the value of discriminate is	
a) -5 b) 17 c) $\sqrt{2}$	d) $2\sqrt{2} - 5$	
4) To draw graph of $4x + a$ 4 b) 3 c) 2 d) -3	5y = 19, y = when $x = 1$	
D. Calva any two of the	following .	(4)
B. Solve any two of the	is the solution of the equation $2x^2 - 7x - 7x$	• •
2. Which term of the foll	owing A.P is 500?	
2,11,20,29,	ertain simultaneous equations and determ	inant D=-5, then fin
the value of determinants	s Dx and Dy	
	·	00 10 1

Scanned by CamScanner

Q3.A) Solve and Mr. Shyamis a red GST of ₹ 8000 his input tax and a. Input tax Output tax ∴ITC =[b. GST pay	etailer. He paid at the time of output tax. We see \$\infty\$ 6500 ax = \$\infty\$ 8000	d GST o	f ₹ 650	0 at he f ax c	the time of ollowing in the time of time of time of the time of time of the time of time o	(4)c of purchase. I information a his payable (He collected and calculate GST.
2. Complete follo	owing table a	□ ccording	g to the g	ene	ral form o	of quadratic e	equation
Quadratic equation	General for	m a		b		С]
$x^2 - 4 = 0$							
$y^2 = 2y - 7$							1
							J
3.Complete the	following tabl	le to drav	w the gra	iph	of the equ	vation $x + x$	y = 3
X	3				-!	,	
У		5	3]	
B. Solve any two 1. How many two 2. Find the value solution: $mx + 4$ 3. Mr. Gupta purand rate of GST purchase.	wo digit number of m for whi $5y - 11 = 0$ rchased 100 s	per are d ch the gi 14x = shares of	iven sim = 15 7 MV 乏.	ulta y 40	neous equ Brokerago	e paid at the	rate of 0.5%
							P. T. O.



(9) .

- 1. Solve the following simultaneous equation using Cramer's rule 3x - 2y = 3, 2x + y = 16
- 2. Solve the quadratic equation $m^2 2m 1 = 0$ by the method of completing
- 3. Find four consecutive terms in an A.P such that the sum of the middle two terms is 18 and the product of the two end terms is 45
- 4. Mr. .Rao invested ₹ 1,25,295 in shares of FV ₹ 10 when MV is ₹ 125 rate of brokerage is 0.2% and GST is 18% then find
 - 1. How many shares were purchased
 - 2. The amount of brokerage paid
 - 3. GST paid for the trading.

Q5 solve any one of the following:

(4)

- 1. A man repays a loan of ₹3250 by paying ₹ 305 in the first month and then decreases the payment by **2** 15 every month. How long will it take to clear his loan?
- 2. A car covers a distance of 270km with some speed. If the speed is decreased by 10km/hr. it will take 54 minutes more to cover the some distance. Find the original speed of the car and original time to reach the required distance.

Q6. Solve any one the following:

- 1. The difference between the roots of the equation $x^2 13x + k = 0$ is 7, find k
- 2. Usha is a proprietor of a firm, registered under GST. She has paid GST of Ex. 12,500 on purchase and collected \$\mathbb{Z}\$ 14,750 on sale. What is the amount of ITC to be claimed? What is the amount of GST payable?

