

Std: X /Div:

Sub-Mathematics- I

Marks:20

Roll No:

No of Pgs-02

Time:1hr

Date: 31.01.2019

**Q I A) Solve the following sub-questions:**

**(2)**

1)  $A = \{1, 2, 3, 4, 5\}$

$B = \{5, 6, 7\}$

Write  $A \cup B$

2) Convert 15:20 into percentage.

**Q1 B) Solve the following sub-question:**

**(2)**

1) Alka spends 90% of the amount sent to her and saves ₹ 120 per month. Find the amount sent to her per month:

**Q2A) Solve the following sub-questions:**

**(4)**

1. Solve the following simultaneous equations by using Cramer's rule:

$$3x - y = 7; x + 4y = 11$$

2. Find the roots of the Quadratic equation:  $m^2 - 11 = 0$

**Q2 B) Solve the following sub-questions:**

**(6)**

1) Smt. Desai sold shares of face value ₹ 100 when the market value was ₹ 50 and received ₹ 4988.20. She paid brokerage 0 and GST on brokerage 18% , then how many shares did she sell?

2) Solve the following simultaneous equations graphically

$$3x - 4y = -7; 5x - 2y = 0$$

Q3 A) Solve the following sub-questions: (4)

- 1) The roots of the equation  $x^2 - 3ax + b = 0$  differ by 4, then show that  $9a^2 = 4b + 16$

Q 3 B) Solve the following activity based question: (2)

- 1) Fill in the blanks with the help of given information for the table given below

Tax invoice of services provided (Sample)								
Food Junction, Khed - Shivapur, Pune								
Mob. No 7588580000					Invoice No 58			
GSTIN : 27 AAAA5555BIZA					email: ahar.khed @yahoo.com			
					Invoice Date : 25-Dec-2017			
SAC	Food Items	QTY	Rate	Taxable Amount	CGST		SGST	
9961	Coffee	1	20	20.00	2.5%	<input type="text"/>	2.5%	<input type="text"/>
9963	Masala Tea	1	10	10.00	<input type="text"/>	<input type="text"/>	2.5%	<input type="text"/>
9962	Masala Dosa	2	60	<input type="text"/>	2.5%	<input type="text"/>	<input type="text"/>	<input type="text"/>
			Total	<input type="text"/>		<input type="text"/>		<input type="text"/>
Grand Total = <input type="text"/>								