

**CHOITHRAM SCHOOL MANIKBAGH INDORE**  
**CLASS IX Session: 2018-19**

Subject: Mathematics  
Allotment Date: 31/08/18

Assignment No: 2  
Submission Date: 05/09/18

S.No	QUESTION	MARKS	LEVEL
<b>OBJECTIVE TYPE</b>			
1	The equation which is parallel to Y axis is (A) $X = 0$ (B) $Y = 0$ (c) $X = a$ (D) $Y = b$	1 mark	Knowledge
2	Which of the following needs proof (A) an axiom (B) a definition (C) a postulate (D) Theorem	1 mark	Understanding
3	An angle is $20^\circ$ more than three times the given angle. If the two angles are supplementary, the angles are A) $20^\circ, 160^\circ$ (B) $40^\circ, 140^\circ$ (C) $60^\circ, 120^\circ$ (D) $50^\circ, 130^\circ$	1 mark	H.O.T.
<b>SHORT ANSWER TYPE I</b>			
4	Express $-2x = 5$ in the form $ax + by + c = 0$ and find the value of a, b and c.	2 Marks	Knowledge
5	Prove that line segment has one and only one midpoint.	2 Marks	Understanding
6	Show that $x = 1, y = 3$ satisfy the linear equation $3x - 4y + 9 = 0$ . Give one more solution of the above equation.	2 Marks	logic
7	It is given that $\angle XYZ = 64^\circ$ and XY is produced to point P, draw a figure from the given information. If ray YQ bisects $\angle ZYP$ , find $\angle XYQ$ and reflex $\angle QYP$	2 Marks	H.O.T.
<b>SHORT ANSWER TYPE II</b>			
8	If a transversal intersects two parallel lines, then each pair of interior angles on the same side of transversal is supplementary.	3 Marks	Understanding
9	The taxi fare in a city charged according to the rate stated as : For the first 3 km distance, the fare is Rs 10 and for every subsequent distance is Rs 4 per Km. taking the distance covered as x km and the total fare for x km as Rs Y 1. Write a linear equation connecting the distance and fare. 2. The driver charges Rs 40 for a distance 10 km.	3 Marks	Understanding
10	Draw the graph of the equation $x + y = 100$ . At what points the graph of the linear equation cuts the x-axis and Y axis also find the area of the obtained closed figure.	3 Marks	Multi concept
<b>LONG ANSWER TYPE</b>			
11	The Linear equation that converts Fahrenheit (F) to Celsius (C) is given by the relation $C = \frac{5F - 160}{9}$ Draw the graph for the above equation and answer these questions. 1. If the temperature is $86^\circ\text{F}$ , What is the temperature in Celsius? 2. If the temperature is $35^\circ\text{C}$ , What is the temperature in Fahrenheit 3. If the temperature is $0^\circ\text{C}$ , What is the temperature in Fahrenheit 4. If the temperature is $0^\circ\text{F}$ , What is the temperature in Celsius	5 Marks	H.O.T.
12	Does Euclid's fifth postulate imply the existence of parallel lines? Explain.	5 Marks	Logic