|  | BCM SCHOOL, BASANT AVENUE, DUGRI, LUDHIANA CLASS-X (MATHEMATICS) ASSIGNMENT(NOVEMBER,2023) TOPIC: COORDINATE GEOMETRY |  |
| :---: | :---: | :---: |
| 1. | If $O(p / 3,4)$ is the midpoint of the line segment joining the points $P(-6,5)$ and $Q(-2$, 3 ), the the value of $p$ is: <br> (a) $7 / 2$ <br> (b) -12 <br> (c) 4 <br> (d) -4 | 1 |
| 2. | The distance of the point $P(-6,8)$ from the origin is <br> (a) 8 units <br> (b) $2 \sqrt{7}$ units <br> (c) 10 units <br> (d) 6 units | 1 |
| 3. | Assertion : The points $(1,5)$ lies on the perpendicular bisectors of line segment joining the points $p(6,5) Q(1,10)$ <br> Reason : The ordinate of points $A$ on $y$ axis is 5 and $B$ has coordinates $(-3,1)$ then the length of $A B$ is 5 units. <br> a.) Both Assertion and Reason are correct and Reason is the correct explanation for Assertion <br> b.) Both Assertion and Reason are correct and Reason is not the correct explanation for Assertion. <br> c.) Assertion is true but the reason is false. <br> d.) Both assertion and reason are false. | 1 |
| 4. | Find the ratio in which the line $x-3 y=0$ divides the line segment joining the points $(-2,-5)$ and $(6,3)$. Find the coordinates of the point of intersection. | 2 |
| 5. | Two vertices of $\triangle A B C$ are $A(-1,4)$ and $B(5,2)$ and its centroid is $G(0,-3)$. Find third vertex. | 3 |
| 6. | The mid points $D, E, F$ of the sides of a triangle $A B C$ are $(3,4),(8,9)$ and $(6,7)$ respectively. Find the vertices of the triangle. | 3 |
| 7. | Using the picture of a hockey field below, answer the questions that follow: <br> 1. Find the point on $x$ axis equidistant from $I$ and $E$ ? <br> 2. Find the point on $y$ axis equidistant from $B$ and $C$ ? <br> 3. Find the distance between the coordinates $K$ and $J$ ? <br> 4. Find the coordinates of the points of trisection of the line segment joining $A$ and $B$ ? | 4 |

