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| **POST MIDTERM TEST****CRT-04** |
| **NAME :** | **CLASS: XII – EINSTEIN** | **SUBJECT: MATHS** | **DATE:** **25.10.19** |
| **CH: – Three Dimensional Geometry(lines)** | **MARKS:**  | **25** |

1. Find the length and the foot of the perpendicular drawn from the point (2, -1, 5) on the line

 $\frac{x-11}{10}$ = $\frac{y+2}{-4}$ = $\frac{z+8}{-11}$. (4)

2. Find the value of $λ$, so that the lines $\frac{1-x}{3}$ = $\frac{7y-14}{2λ}$ = $\frac{5z-10}{11}$ and $\frac{7-7x}{3λ}$ = $\frac{y-5}{1}$ = $\frac{6-z}{5}$ are perpendicular to each other. (4)

3. Find the Cartesian equation of the line which passes through the point (-2, 4, -5) and is parallel to the line $\frac{x+3}{3}$ = $\frac{4-y}{5}$ = $\frac{z+8}{6}$ . (4)

4. Find the point on the line $\frac{x+2}{3}$ = $\frac{y+1}{2}$ = $\frac{z-3}{2}$ at a distance $3 \sqrt{2}$ from the point (1, 2, 3). (4)

5. Find the shortest distance between the following two lines:

  (4)

6. Find the equation of a line passing through the point *P*(2, -1, 3) aqnd perpendicular to the lines:

  (5)