**EXPERIMENT 9**

**CONCAVE MIRROR**

**Day & Date:**

Aim: To measure v for different values of u hence to determine focal length of the given concave mirror.

Theory:

 Focal length of the given concave mirror is f = uv/(u+v)

RAY DIAGRAM:

OBSERVATIONS:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sl. No. | Position of  | Object distance (u) cm | Image distance (v) Cm | $$Focal length f= \frac{uv}{u+v}$$ cm |
| Object (O) | Mirror (M) | Image (I) |
| 01 |  |  |  |  |  |  |
| 02 |  |  |  |  |  |  |
| 03 |  |  |  |  |  |  |
| 04 |  |  |  |  |  |  |
| 05 |  |  |  |  |  |  |

**Mean focal length of the given concave mirror =**

**Result:**

 Focal length of the given concave mirror = cm.