| Question number | Answer | Notes | Marks |
|---|---|---|---|
| 8 (a) | Centre of gravity; | Accept 'Centre of Mass' | 1 |
| (b) (i) | Moment = force x (perpendicular) distance; | Condone M = f x d | 1 |
| (ii) | Any correct moment;<br>i.e. 2.1 x 0.28 or W x 0.032<br><br>Evidence of use of principle of moments;<br>i.e. 2.1 x 28 = W x 3.2<br><br>Re-arrangement ; i.e. W = 2.1 x 28 /3.2<br><br>Evaluation; W = 18 (N) | Allow calculation performed in cm<br><br>Accept unrounded 18.375, 18.4 N.<br><br>Condone for 1 mark statement of principle of moments. | 4 |