

Name of the Student: _____

Max. Marks : 9 Marks

Time : 9 Minutes

Mark Schemes

Q1.

- (a) (i) towards the centre of the circle
accept inwards
accept a correct description
'along the string' is insufficient
1
- (ii) tension (in the string)
accept pull of the string
'the string' is insufficient
or
weight (on the end of the string)
'the student' is insufficient
'turning action' is insufficient
1
- (b) (i) each may (also) affect the speed
accept results for speed
1
- so only one independent variable
accept only one variable affects dependent variable
'fair test' is insufficient
'they are control variables' is insufficient
1
- (ii) continuous
both required

dependent
1
- (iii) reduces (absolute) timing error (for one rotation)
accept too fast to time one
or
increases / improves reliability / accuracy (for one rotation)
ignore checking for anomalous results
to work out an average is insufficient
1
- (c) speed increases with centripetal force
accept positive correlation

do **not** accept proportional

1

- (d) (i) gravitational pull (of the Earth)
accept gravity

1

- (ii) **No**

both parts required – however this may have been subsumed within the reason

geostationary orbits once every 24 hours
accept a correct comparative description

1

[9]