Faculty: Science   Course: Physics   Year: 12

Assessment Task: Processing Skills and Written Task

Assessment Weighting: 20%   Due: Term 2 Week 10 Date: 30/06/2020

Task Type: Hand in Task  In Class Task  Practical Task

Outcomes assessed (NESA)

PH11/12-4 selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media
PH11/12-5 analyses and evaluates primary and secondary data and information
PH11/12-6 solves scientific problems using primary and secondary data, critical thinking skills and scientific processes
PH12-12 describes and analyses qualitatively and quantitatively circular motion and motion in a gravitational field, in particular, the projectile motion of particles
PH12-13 explains and analyses the electric and magnetic interactions due to charged particles and currents and evaluates their effect both qualitatively and quantitatively

Task Description/Overview

This task assesses your ability to:

(i) Process information and explain the characteristics of Projectile Motion and Electric and Magnetic Fields.
(ii) Analyse data and problem solve using Physics understanding and calculations.
(iii) Graph data and analyse graphs.

Detailed Assessment Task Description

This task will be completed during your double period in P Lab 1.

Length of Assessment: 1 hr & 30 minutes plus 5 minutes reading time

Structure of Task: Total of 50 Marks

Short Answer (41 marks)
Extended Response (9 marks)

Topics to be assessed: Projectile Motion, Circular Motion, Motion in Gravitational Fields, Charged Particles, Conductors and Electric & Magnetic fields, the Motor Effect, Electromagnetic Induction and applications of the Motor Effect.

Materials required: Scientific calculator, pens, pencil, ruler & eraser.
A formula data sheet will be provided.
## Assessment Criteria

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Mark Range</th>
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<tbody>
<tr>
<td>Outstanding (O)</td>
<td>The student has an extensive knowledge and understanding of the content and can readily apply this knowledge. In addition, the student has achieved a very high level of competence in the processes and skills and can apply these skills to new situations.</td>
<td>79.5-100 %</td>
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<tr>
<td>High (H)</td>
<td>The student has a thorough knowledge and understanding of the content and a high level of competence in the processes and skills. In addition, the student is able to apply this knowledge and these skills to most situations.</td>
<td>69.5-79</td>
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<tr>
<td>Sound (S)</td>
<td>The student has a sound knowledge and understanding of the content and has achieved a good level of competence in the processes and skills.</td>
<td>49.5-69</td>
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<tr>
<td>Basic (B)</td>
<td>The student has a basic knowledge and understanding of the content and has achieved a basic level of competence in the processes and skills.</td>
<td>19.5-49</td>
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<tr>
<td>Limited (L)</td>
<td>The student has an elementary knowledge and understanding in a few areas of the content and still requires further work to achieve competence in the processes and skills.</td>
<td>0-19</td>
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### Satisfactory completion of courses

A course has been satisfactorily completed, when the student has:
- Followed the course developed/endorsed by the NSW Educational Standards Authority (NESA)
- Applied himself/herself with diligence and sustained effort to the set tasks and experiences provided in the course.
- Achieved some or all of the course outcomes