



education

Department:
Education
North West Provincial Government
REPUBLIC OF SOUTH AFRICA

PROVINCIAL ASSESSMENT PROVINSIALE ASSESSERING

GRADE/GRAAD 12

TECHNICAL SCIENCES P1/TEGNIJSE WETENSKAPPE V1

JUNE/JUNIE 2025

ADD MARKING GUIDELINES/NASIENRIGLYNE ADD

MARKS/PUNTE: 150

**These errata marking guideline consists of 2 pages./
Hierdie nasienriglyne errata bestaan uit 2 bladsye.**

QUESTION/VRAAG 1

- 1.1 B/C ✓✓ (2)

QUESTION/VRAAG 2

- 2.1.1 Normal force/ *Normaalkrag* ✓ (accept/aanvaar: F_N/N)
Force of gravity/Gravitational force/ *Swaartekrag/Gravitasiekrag* ✓
(accept/aanvaar: F_g/w) (2)

- 2.3 When a net(resultant) force is applied to an object of mass, m , it accelerates the object in the direction of the net force. ✓✓ The acceleration is directly proportional to the net (resultant) force and inversely proportional to the mass of the object.

Wanneer 'n netto (resulterende) krag op 'n voorwerp met 'n massa, m , inwerk, versnel die voorwerp in die rigting van die netto krag. ✓✓ Die versnelling is direk eweredig aan netto (resulterende) krag en omgekeerd eweredig aan die massa van die voorwerp. (2)

QUESTION/VRAAG 3

- 3.1.3 Is equal to the change in momentum. ✓✓ (2)
Is gelyk aan die verandering in momentum.

- 3.1.4 $\Delta p = F_{\text{net}} \Delta t$
Impulse/*Impuls* = $F_{\text{net/nettp}} \Delta t$ } ✓ any one/ *enige een*
= 60×10^3 ✓ (0,01) ✓
= 600 N.s ✓ to the right/ *na regs* ✓ (5)

- 3.2.5 The total linear momentum of an isolated system remains constant (is conserved) (in magnitude and direction). ✓✓

Die totale lineêre momentum van 'n geïsoleerde sisteem bly constant (word behou) (in grootte en rigting). (2)

QUESTION/VRAAG 4

- 4.2 The product of the applied force on an object and the displacement in the direction of the force. ✓✓

Die produk van die toegepaste krag op 'n voorwerp en die verplasing in die rigting van die krag. (2)

QUESTION 7/ VRAAG 7

- 7.1.3 41° ✓✓ (2)