Province of the
EASTERN CAPE
EDUCATION

CHIEF DIRECTORATE: EXAMINATIONS AND ASSESSMENT
Steve Vukile Tshwete Complex, Zone 6 Zwelitsha, 5608, Private Bag X0032, Bhisho, 5605 REPUBLIC OF SOUTH AFRICA:
Enquiries**: Mrs P. Japhta. Tel: 040 602 7031. Fax: 040 602 7295. E-mail:** Penelope.Japhta@ecdoe.gov.za
Website: www.ecdoe.gov.za

Ref. no.	13/P	Tel.:	(040) 608 7031/060 523 8658
Enquire:	Mrs P. Japhta	Fax:	040 608 7295

ERRATUM

TO: **CHIEF EDUCATION SPECIALISTS**
DISTRICT CURRICULUM COORDINATORS
DISTRICT ASSESSMENT OFFICIALS (DAOs
DISTRICT SUBJECT ADVISORS (DSAs)
PROVINCIAL SUBJECT COORDINATORS
CIRCUIT MANAGERS
DEPUTY CHIEF EDUCATION SPECIALISTS
SENIOR EDUCATION SPECIALISTS
PRINCIPALS OF SCHOOLS IN THE FET BAND

SUBJECT: **ERRATUM – PHYSICAL SCIENCES P1 GRADE 12 JUNE COMMON 2024**

DATE: **07 JUNE 2024**

The Physical Sciences P1 Grade 12 June Common Examination was written on Friday, 31 May 2024. We were made aware of certain amendments and omissions that were discovered during the marking process and memorandum discussion on the provided marking guideline.

In order to address this and to ensure that learners are not disadvantaged, the following standardised approach to marking must be adopted across the Province. The following guidelines regarding marking was prepared in conjunction with the examiner and moderator.

QUESTION 1

1.6. C ✓✓

QUESTION 2

2.1. The force that opposes the motion of a moving object relative to the surface ✓.✓. (**2 or 0**)

2.3.1.

$f_k = \mu_k N$ } any one ✓.
$f_k = \mu_k (mg - F\sin\theta)$ }

$f_k = [0,2 \times (20 \times 9,8 - 105\sin 25^o \checkmark)]$ ✓.

$f_k = 30,33$ N left ✓.

2.3.3. **Positive Marking** from **2.3.1**.

QUESTION 3

3.2. No direction. Force between two objects.

3.3. EQUAL TO. ✓ Newston's law 3. ✓

OR

When object A exerts a force on object B, object B simultaneously exerts an oppositely directed force on object A of equal magnitude.

3.4.

$F_{net} = ma$ ✓
[(4 x14,98) ✓= 1500a] ✓
$a = 3,99 \times 10^{-2}\ m.s^{-2}$ ✓

QUESTION 4

4.1. The motion of an object upon which the only force acting is gravitational force. ✓✓

4.2.2. **Positive Marking** from **4.2.2**.

4.2.4. Same (initial) velocity ✓. They are undergoing Free fall motion✓ **OR** same gravitational acceleration ✓.

QUESTION 5

5.3.1 Typing error: $m_1v_{i1} + m_2v_{i2} = (m_1 + m_2)\ v_f$ ✓

Positive Marking from **5.3.1**

5.4. $E_{ktotal} = ½\ (mv_i^2 + mv_f^2)$

$E_{ktotal} = ½\ (mv_i^2 + mv_f^2)$ ✓

$E_{ki} = ½ \times 1\ 500 \times 20^2 + 0$ ✓

$E_{ki} = 300\ 000$ J
$E_{kf} = ½ \times 1\ 500 \times 12,5^2 + ½ \times 900 \times 12,5^2$ ✓

$E_{kf} = 187\ 500$ J
$E_{ki} \neq E_{kf}$ ✓

Inelastic collision. ✓

5.5. The buble wrap provides soft surface ✓ which increases the contact time of the collision ✓ and decreases the net force exerted on the equipment. ✓ **OR** Net force is inversely proportional to the contact time. ✓

QUESTION 6

6.1. Accept: W ✓ for Gravitational force.

6.3.2. Accept the Range (55,29-55,35)

QUESTION 7

7.1. Accept:

A force in which the ***total/net*** work done by the same force is dependent of the path taken. ✓✓ (**2 or 0**)

QUESTION 8

8.2. **Accepted**: The frequency perceived is higher than the frequency of the source✓ or The frequency with which the wave strike the ear is greater than the frequency at which they are produced. ✓

8.4.2. Stays the same ✓

QUESTION 9

9.1. Part marking

The electrostatic force between two points charges is directly proportional to the product of the charges ✓ and inversely proportional to the square of the distance between them. ✓

9.3.1. **Positive Marking** from **9.3.1**.

9.3.3. E_{net} = 29 530 $N.C^{-1}$ Right ✓.

We sincerely apologise for any inconvenience we might have caused.

Yours in education.

MRS P.E. JAPHTA
(A) CES: AIDIBM SUBDIRECTORATE

7 June 2024
DATE