



Examinations and Assessment Directorate
Steve Vukile Tshwete Complex, Zwelistsha, 5608
REPUBLIC OF SOUTH AFRICA, Website: www.ecdoe.gov.za
E-mail: Nomvuyo.Mbeleki@ecdoe.gov.za

Ref. No. 13/P

Tel.: (040) 608 7028/082 391 1342

Enquiries: Ms N. Mbeleki

Fax:

**TO: DISTRICTS HEADS OF EXAMINATIONS
PRINCIPALS OF SCHOOLS IN THE FET BAND**

**FROM: CES: INSTRUMENT DEVELOPMENT AND MODERATION SECTION
MS N. MBELEKI**

SUBJECT: ERRATA – TECHNICAL SCIENCES (SEPTEMBER 2018)

DATE: 2018

The TECHNICAL SCIENCES Grade 12 September was written on, 07 September 2018. We were made aware of certain errors, amendments and omissions that were discovered during the marking process.

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 with regard to marking was prepared in conjunction with the examiner and moderator.

ERRATA – TECHNICAL SCIENCES

QUESTION 2 (USE THE FOLLOWING OPTIONS IN QUESTIONS 2.2, 2.3, 2.4 & 2.5. IF A LEARNER USES FRICTIONLESS SURFACE)

2.2.	Tension (T) ✓ Applied force (F) ✓	(2)				
2.3	<table border="1" style="width: 100%;"> <tr> <th data-bbox="288 533 855 568">OPTION 1</th> <th data-bbox="855 533 1406 568">OPTION 2</th> </tr> <tr> <td data-bbox="288 568 855 1032"> </td> <td data-bbox="855 568 1406 1032"> <p style="text-align: center;">N ✓ F_v</p> <p style="text-align: center;">T ✓ F_H</p> <p style="text-align: center;">F_g ✓</p> <p style="text-align: center;">F_v & F_H - ✓ Correct direction of F_v ✓</p> </td> </tr> </table>	OPTION 1	OPTION 2		<p style="text-align: center;">N ✓ F_v</p> <p style="text-align: center;">T ✓ F_H</p> <p style="text-align: center;">F_g ✓</p> <p style="text-align: center;">F_v & F_H - ✓ Correct direction of F_v ✓</p>	(5)
OPTION 1	OPTION 2					
	<p style="text-align: center;">N ✓ F_v</p> <p style="text-align: center;">T ✓ F_H</p> <p style="text-align: center;">F_g ✓</p> <p style="text-align: center;">F_v & F_H - ✓ Correct direction of F_v ✓</p>					
2.4	<p>On block A $F_{net} = ma$ ✓ $F \cos \theta - T = ma$ $(500)(\cos 30^\circ) - T = (30)(a)$ ✓ $433,01 - T = 30a$(1)</p> <p>On block B $F_{net} = ma$ $T = 20a$ ✓(2)</p> <p>Subs (2) in (1) $433,01 - 20a = 30a$ ✓ $a = 8,66 \text{ m}\cdot\text{s}^{-2}$ ✓</p>	(6)				
2.5	<table border="1" style="width: 100%;"> <tr> <th data-bbox="288 1579 855 1615">OPTION 1</th> <th data-bbox="855 1579 1406 1615">OPTION 2</th> </tr> <tr> <td data-bbox="288 1615 855 1758"> $T = 20a$ ✓ $T = (20)(8,66)$ ✓ $T = 173,2 \text{ N}$ ✓ </td> <td data-bbox="855 1615 1406 1758"> $433,01 - T = 30a$ ✓ $433,01 - T = 30(8,66)$ ✓ $T = 433,01 - 259,8$ $T = 173,21 \text{ N}$ ✓ </td> </tr> </table>	OPTION 1	OPTION 2	$T = 20a$ ✓ $T = (20)(8,66)$ ✓ $T = 173,2 \text{ N}$ ✓	$433,01 - T = 30a$ ✓ $433,01 - T = 30(8,66)$ ✓ $T = 433,01 - 259,8$ $T = 173,21 \text{ N}$ ✓	(3)
OPTION 1	OPTION 2					
$T = 20a$ ✓ $T = (20)(8,66)$ ✓ $T = 173,2 \text{ N}$ ✓	$433,01 - T = 30a$ ✓ $433,01 - T = 30(8,66)$ ✓ $T = 433,01 - 259,8$ $T = 173,21 \text{ N}$ ✓					
8	Although the constant was not given, learners should know their constants. For incorrect constant, learners will lose marks.					

