NATIONAL SENIOR CERTIFICATE

GRADE 12

ENGINEERING GRAPHICS AND DESIGN P2

NOVEMBER 2022

MARKING GUIDELINES

MARKS: 100

These marking guidelines consist of 7 pages.
# ANSWERS

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**ANSWER 19**

- FREEHAND
- ONE CIRCLE ONLY

**ANSWER 20**

- LENGTHENING OF BREAK LINES
- FREEHAND

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**HORIZONTAL CLs without CIRCLES** 2 x 0.5

**VERTICAL CLs without CIRCLES** 2 x 0.5

**PARALLEL BREAK LINES** 2 x 0.5

**ZIG ZAG** 2 x 0.5

**NOTE:** BREAKLINES CAN BE ALIGNED or VERTICAL.
**DISPLACEMENT GRAPH**

**SCALE 10 mm = 30°**

1. **CONSTRUCTION**
   - LENGTH 120 + LINE DIVISIONS \( \frac{4}{5} \) 1
   - 150° HORIZONTAL LINE DIVISION for UAR 1
   - VERTICAL DIVISIONS for UAR 1
   - (hor. / vert. division number must be equal)
   - FIRST HALF CONSTRUCTION for UAR 1
   - SECOND HALF CONSTRUCTION for UAR 1

2. **NOTE ON CURVE QUALITY**
   - MUST BE THROUGH DETERMINED
   - POINTS, & CURVE MUST BE
   - CONTINUES AND SMOOTH

**ASSESSMENT CRITERIA 2.2**

1. GRAPH CONSTRUCTION 5
2. POINTS + CURVE 6
3. LABELS 1

**SUBTOTAL 2.2** 12
1. CENTRE LINES
   SANS COMPLIANT  1
   1 - 4 = 0,5;  5 - 7 = 1  1
   2

2. ASSEMBLY
   1 MARK FOR EVERY COMPONENT
   CORRECTLY ASSEMBLED (11 PARTS - 1) = 10

ASSESSMENT CRITERIA

FRONT VIEW
1. BASE  5 ½
2. TENSION SCREW  1 ½
3. FLY WHEEL  1
4. NUT + WASHER  4 ½
5. INDICATION OF SYMMETRY  2
SUBTOTAL  14 ½

GENERAL
1. CENTRE LINES  2
2. ASSEMBLY  10
SUBTOTAL  12

PAPER 2 QUESTION 4
GRADE 12
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