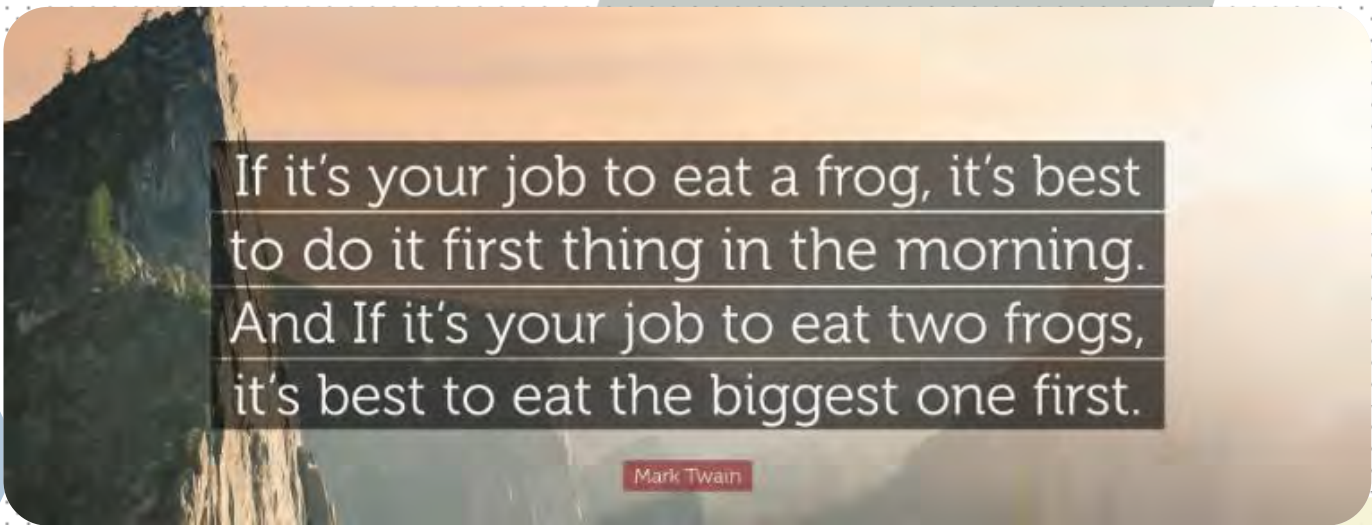


# SA-STUDENT

To pass high school please visit us at:  
<https://sa-student.com/>



If it's your job to eat a frog, it's best  
to do it first thing in the morning.  
And If it's your job to eat two frogs,  
it's best to eat the biggest one first.

Mark Twain



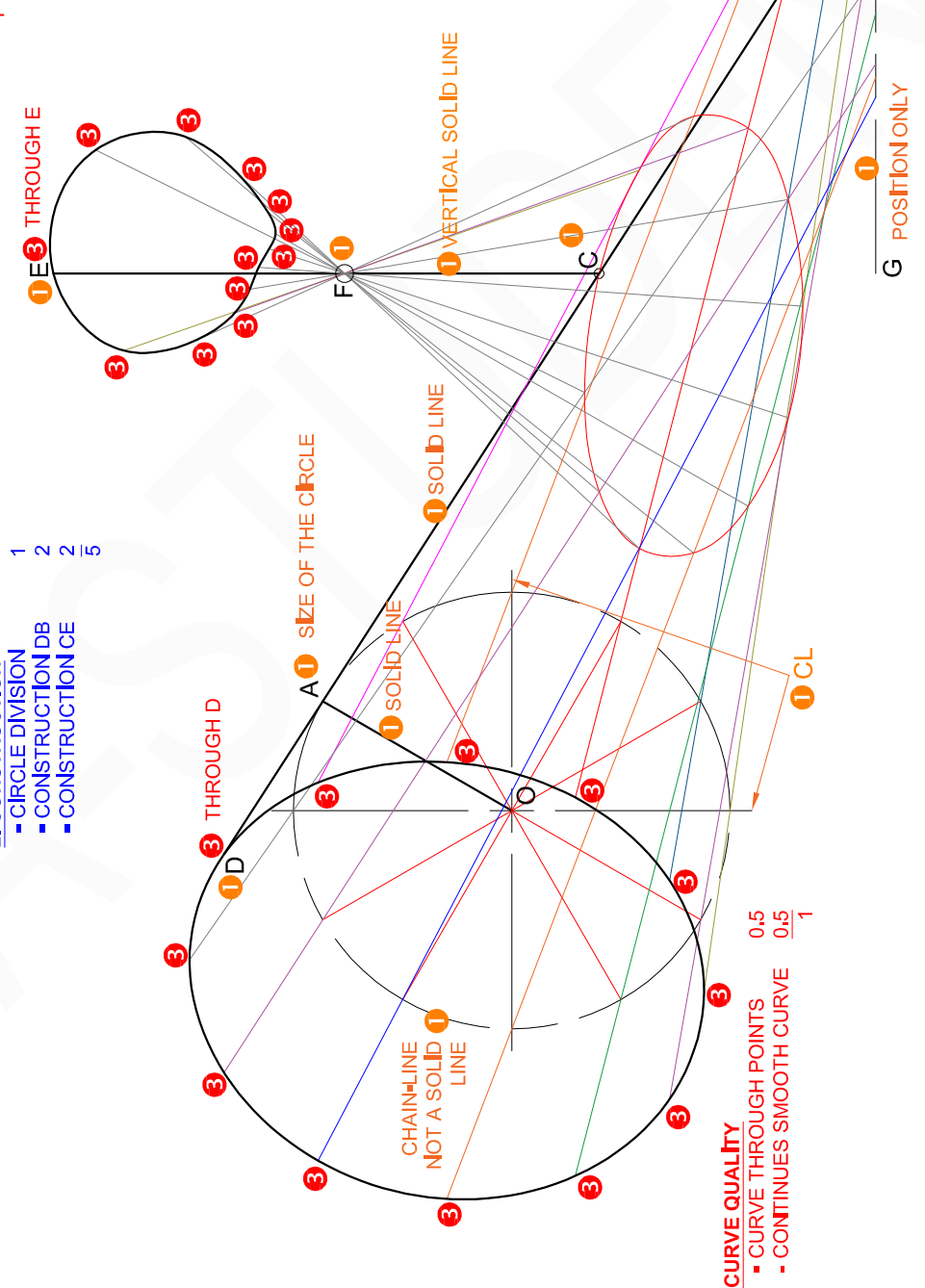
| ASSESSMENT CRITERIA 2.1 |                     |
|-------------------------|---------------------|
| 1                       | GIVEN + LABELS + CL |
| 2                       | CONSTRUCTION        |
| 3                       | LOC OF D + E        |
| SUBTOTAL 2.1            |                     |
| 25                      |                     |

**CURVE QUALITY**

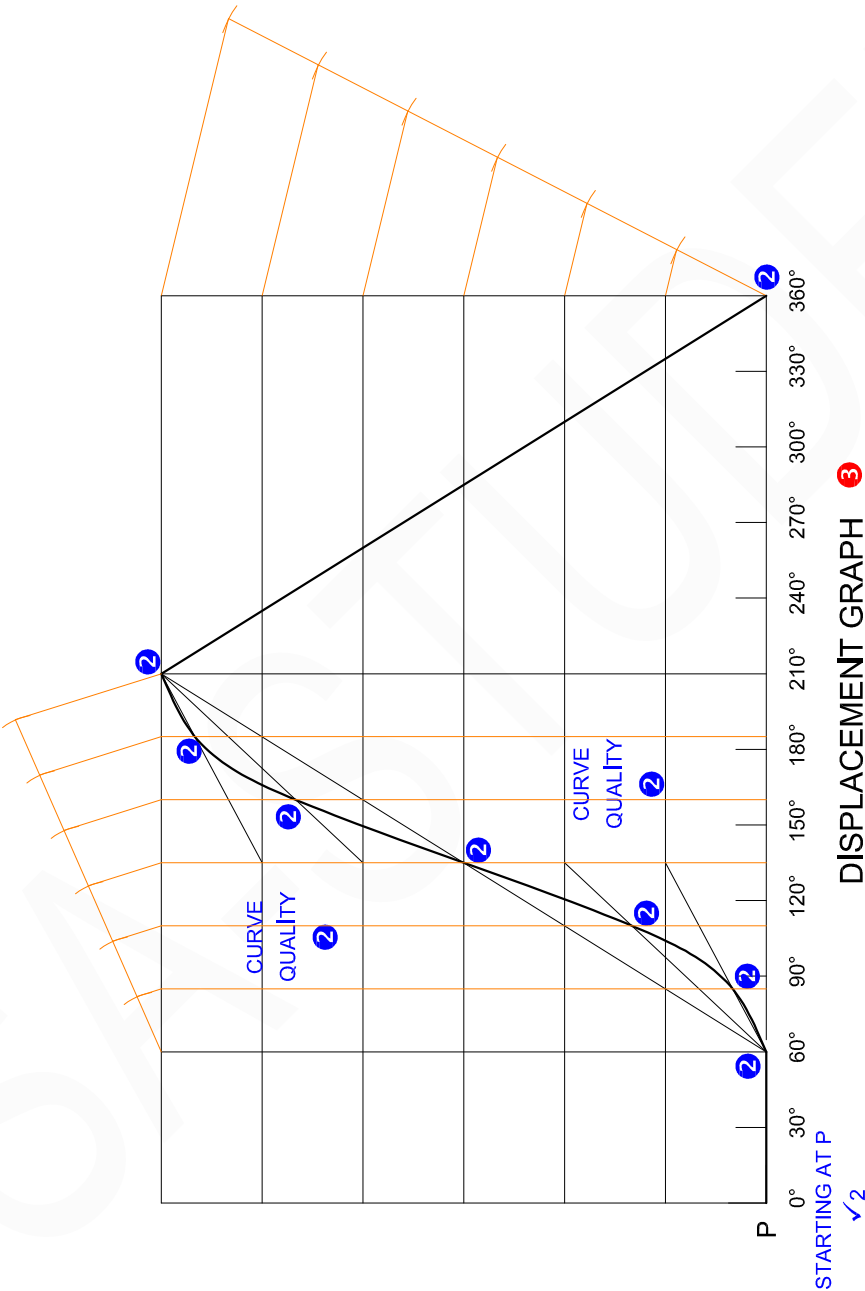
- CURVE THROUGH POINTS 0.5
- CONTINUES SMOOTH CURVE 0.5

**2. CONSTRUCTION**

- CIRCLE DIVISION 1
- CONSTRUCTION DB 2
- CONSTRUCTION CE 2



PAPER 2 QUESTION 2  
GRADE 12  
NOVEMBER 2022  
MARKING GUIDELINE

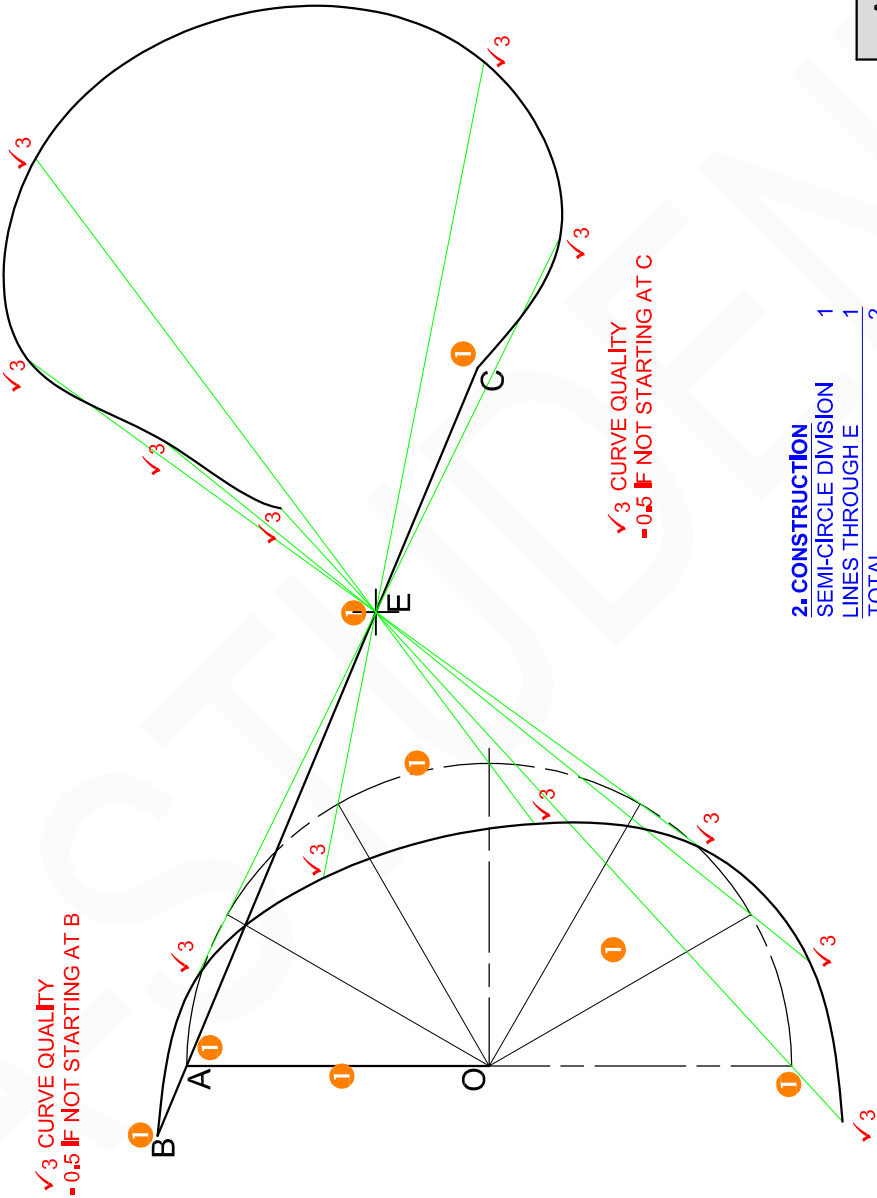


| ASSESSMENT CRITERIA 2.2 |                    |    |
|-------------------------|--------------------|----|
| 1                       | GRAPH CONSTRUCTION | 5  |
| 2                       | POINTS + CURVE     | 6  |
| 3                       | LABELS             | 1  |
| SUBTOTAL 2.2            |                    | 12 |

PAPER 2 QUESTION 2  
GRADE 12  
NOVEMBER 2022  
MARKING GUIDELINE

NOTE ON CURVE QUALITY  
MUST BE THROUGH DETERMINED  
POINTS, & CURVE MUST BE  
CONTINUOUS AND SMOOTH

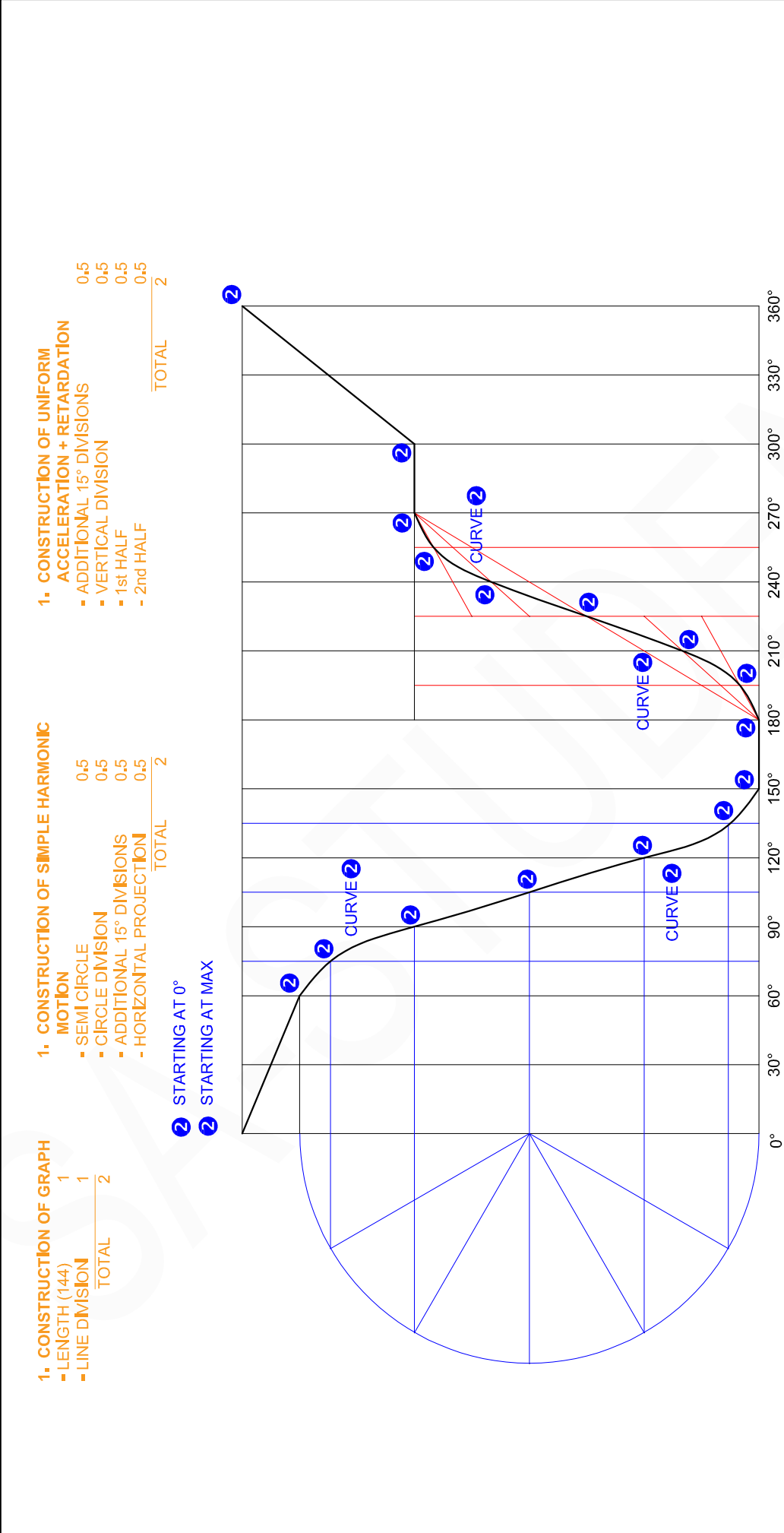
1. CONSTRUCTION
- LENGTH 120 + LINE DIVISIONS  $(\frac{1}{2} + \frac{1}{2})$
  - 150° HORIZONTAL LINE DIVISION for UAR
  - VERTICAL DIVISIONS for UAR (hor / vert. division number must be equal)
  - FIRST HALF CONSTRUCTION for UAR
  - SECOND HALF CONSTRUCTION for UAR



2. CONSTRUCTION  
SEMI-CIRCLE DIVISION  
LINES THROUGH E  
TOTAL

1  
1  
2

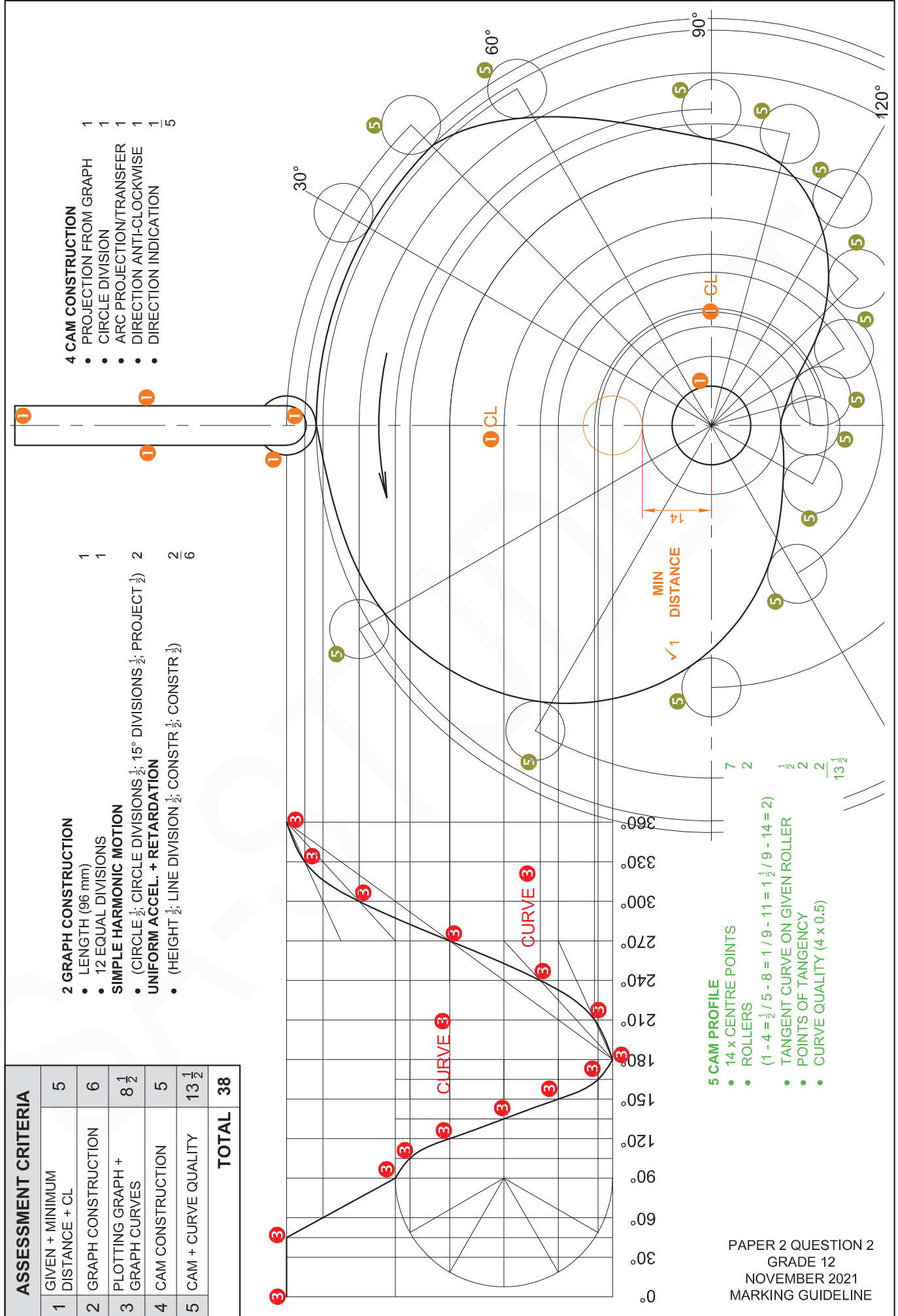
| ASSESSMENT CRITERIA 2.1 |                |    |    |
|-------------------------|----------------|----|----|
| 1                       | GIVEN          | 4  |    |
| 2                       | CONSTRUCTION   | 2  |    |
| 3                       | POINTS + CURVE | 14 |    |
| TOTAL                   |                |    | 20 |



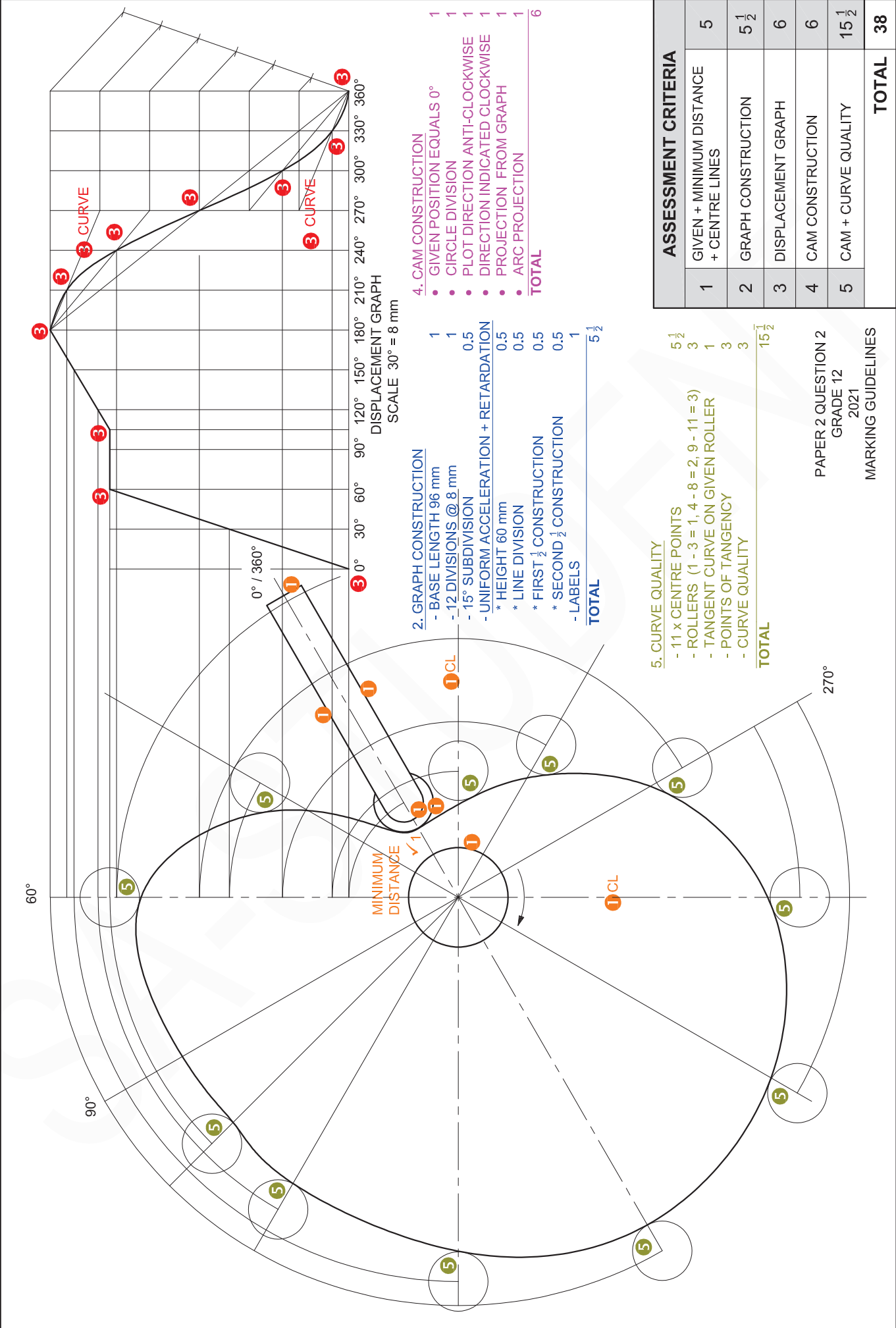
**DISPLACEMENT GRAPH**

**SCALE: 144 mm = 360° ROTATION**

| ASSESSMENT CRITERIA 2.2 |                |
|-------------------------|----------------|
| 1                       | CONSTRUCTION   |
| 2                       | POINTS + CURVE |
| 3                       | LABELS         |
| TOTAL                   |                |

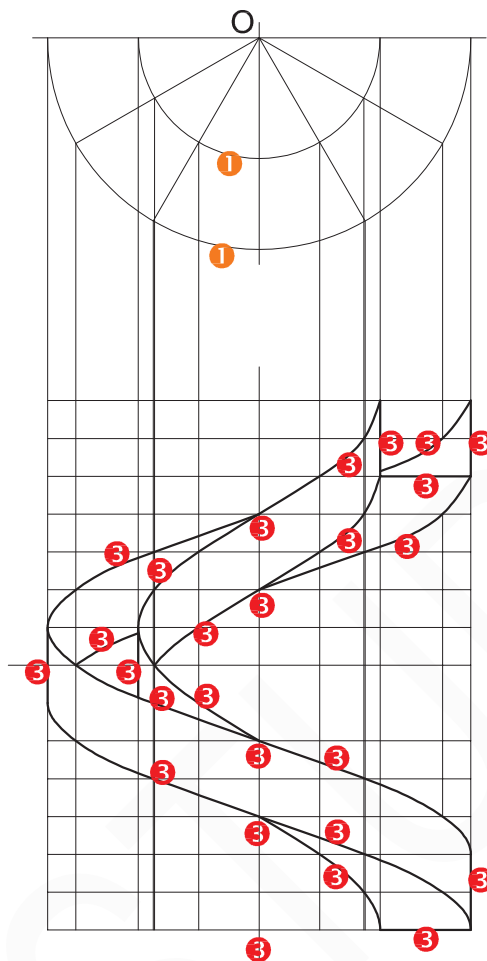


PAPER 2 QUESTION 2  
GRADE 12  
NOVEMBER 2021  
MARKING GUIDELINE



| ASSESSMENT CRITERIA |                                         |
|---------------------|-----------------------------------------|
| 1                   | GIVEN + MINIMUM DISTANCE + CENTRE LINES |
| 2                   | GRAPH CONSTRUCTION                      |
| 3                   | DISPLACEMENT GRAPH                      |
| 4                   | CAM CONSTRUCTION                        |
| 5                   | CAM + CURVE QUALITY                     |
| TOTAL               |                                         |

PAPER 2 QUESTION 2  
GRADE 12  
2021  
MARKING GUIDELINES

**2. CONSTRUCTIONS**

|                         |          |
|-------------------------|----------|
| - CIRCLE DIVISIONS      | 0.5      |
| - PITCH                 | 0.5      |
| - PITCH DIVISIONS       | 1        |
| - VERTICAL PROJECTION   | 1        |
| - HORIZONTAL PROJECTION | 1        |
| - DIRECTION             | <u>2</u> |
|                         | <b>6</b> |

**4. CURVE QUALITY**

|                             |          |
|-----------------------------|----------|
| - CURVE THROUGH POINTS      | 1        |
| - CURVE CONTINUOUS / SMOOTH | <u>1</u> |
|                             | <b>2</b> |

**ASSESSMENT CRITERIA 2.1**

|              |               |           |
|--------------|---------------|-----------|
| 1            | GIVEN + CL    | 1         |
| 2            | CONSTRUCTION  | 6         |
| 3            | HELIX         | 13        |
| 4            | CURVE QUALITY | 2         |
| <b>TOTAL</b> |               | <b>22</b> |

PAPER 2 QUESTION 2.1  
GRADE 12  
SC/NSC 2020  
MARKING GUIDELINE

**1. CONSTRUCTIONS**

- LENGTH : 120 mm 0.5
- 12 DIVISIONS 0.5

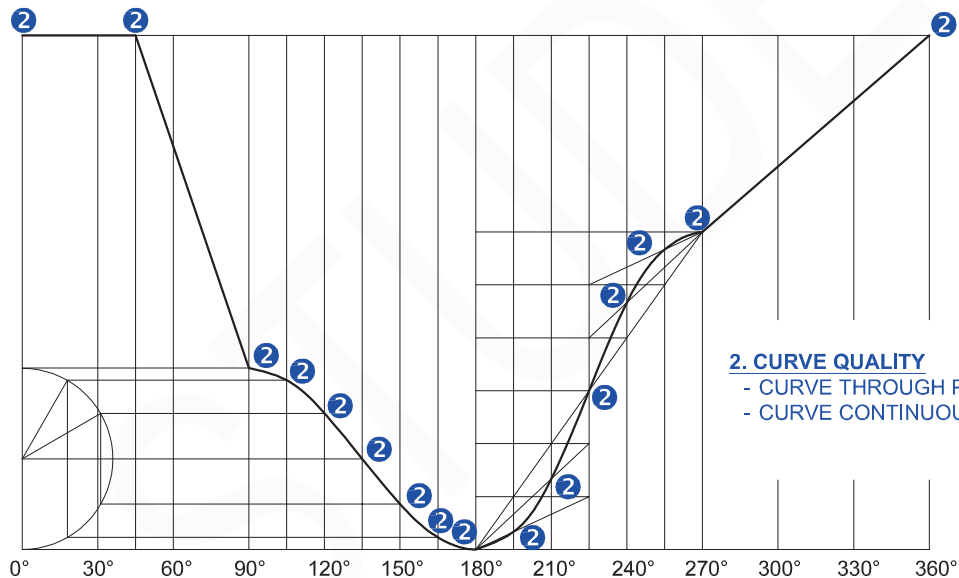
**SIMPLE HARMONIC**

- 15° SUBDIVISIONS 0.5
- SEMI CIRCLE 0.5
- CIRCLE DIVISION 0.5
- HORIZONTAL PROJECTION 0.5

**UNIFORM ACCELERATION & RETARDATION**

- 15° SUBDIVISIONS 0.5
- LINE DIVISION 0.5
- FIRST HALF CONSTRUCTION 0.5
- SECOND HALF CONSTRUCTION 0.5

**LABELING** 1  
6

**2. CURVE QUALITY**

- CURVE THROUGH POINTS 0.5
- CURVE CONTINUOUS / SMOOTH 0.5  
1

DISPLACEMENT GRAPH  
SCALE 360° : 120 mm

**ASSESSMENT CRITERIA 2.2**

|              |                 |           |
|--------------|-----------------|-----------|
| 1            | CONSTRUCTION    | 6         |
| 2            | POINTS + CURVES | 9         |
| <b>TOTAL</b> |                 | <b>15</b> |

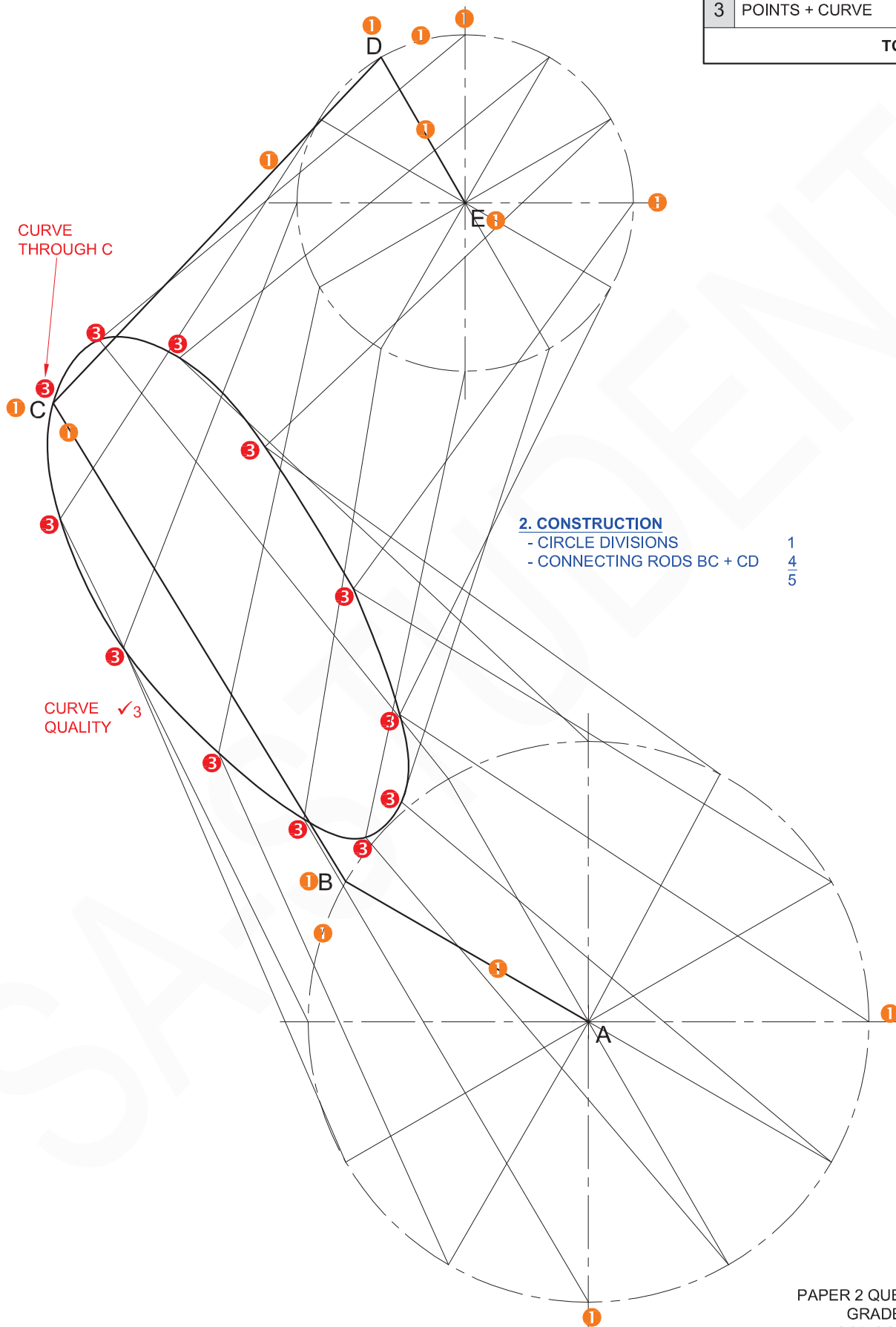
PAPER 2 QUESTION 2.2  
GRADE 12  
SC/NSC 2020  
MARKING GUIDELINE

DISPLACEMENT GRAPH  
SCALE  $30^\circ = 8 \text{ mm}$

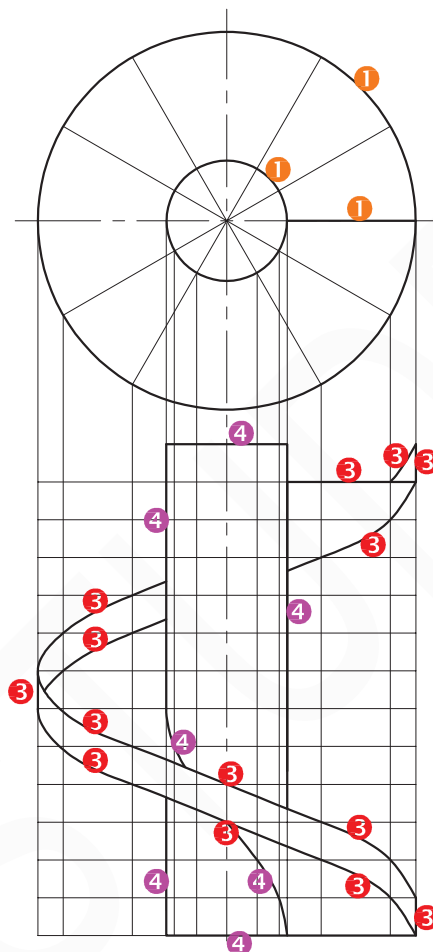
Please turn over

**ASSESSMENT CRITERIA 2.1**

|              |                |           |
|--------------|----------------|-----------|
| 1            | GIVEN          | 7         |
| 2            | CONSTRUCTION   | 5         |
| 3            | POINTS + CURVE | 7         |
| <b>TOTAL</b> |                | <b>19</b> |



PAPER 2 QUESTION 2.1  
GRADE 12  
SC/NSC 2019  
MARKING GUIDELINE

**2. CONSTRUCTION**

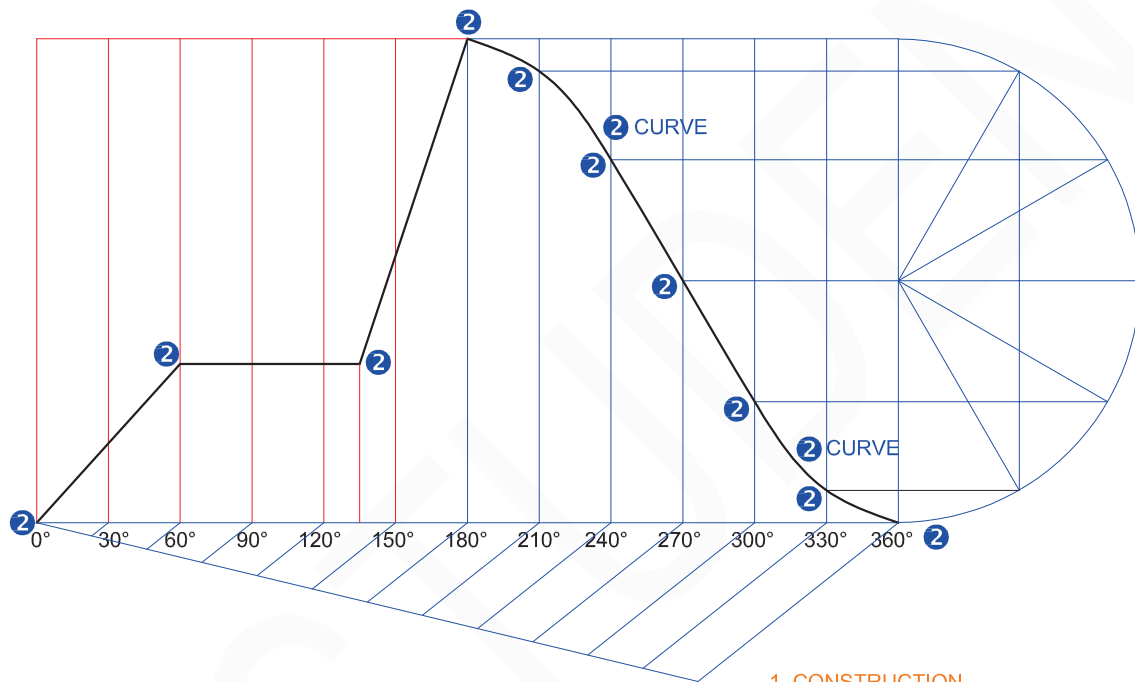
- CIRCLE DIVISION
- PITCH
- PITCH DIVISION
- HORIZONTAL PROJECTION
- VERTICAL PROJECTION
- DIRECTION

1  
2  
1  
2  
1  
2  
3  
2  
1  
5

CURVE QUALITY ✓3 ✓3

| ASSESSMENT CRITERIA |                     |                 |
|---------------------|---------------------|-----------------|
| 1                   | GIVEN               | 1 $\frac{1}{2}$ |
| 2                   | CONSTRUCTION        | 5               |
| 3                   | OUTER HELIX         | 9               |
| 4                   | INNER HELIX + SHAFT | 3 $\frac{1}{2}$ |
| SUBTOTAL            |                     | 19              |

PAPER 2 QUESTION 2.2  
GRADE 12  
SC/NSC 2019  
MARKING GUIDELINE



DISPLACEMENT GRAPH ③  
SCALE: 114 mm = 360° ROTATION ③

1 CONSTRUCTION

- LENGTH (114) 1
- \* LINE DIVISION (114 INTO 12 PARTS) 1
- SIMPLE HARMONIC MOTION
- \* SEMI CIRCLE 1
- \* CIRCLE DIVISION 2
- \* VERTICAL PROJECTION 2
- \* HORIZONTAL PROJECTION 2

TOTAL 4

**ASSESSMENT CRITERIA 2.1**

|                 |                |           |
|-----------------|----------------|-----------|
| 1               | CONSTRUCTION   | 4         |
| 2               | POINTS + CURVE | 6         |
| 3               | LABELS         | 1         |
| PENALTIES (-)   |                |           |
| <b>SUBTOTAL</b> |                | <b>11</b> |

PAPER 2 QUESTION 2.1  
GRADE 12  
NOVEMBER 2018  
MARKING GUIDELINE

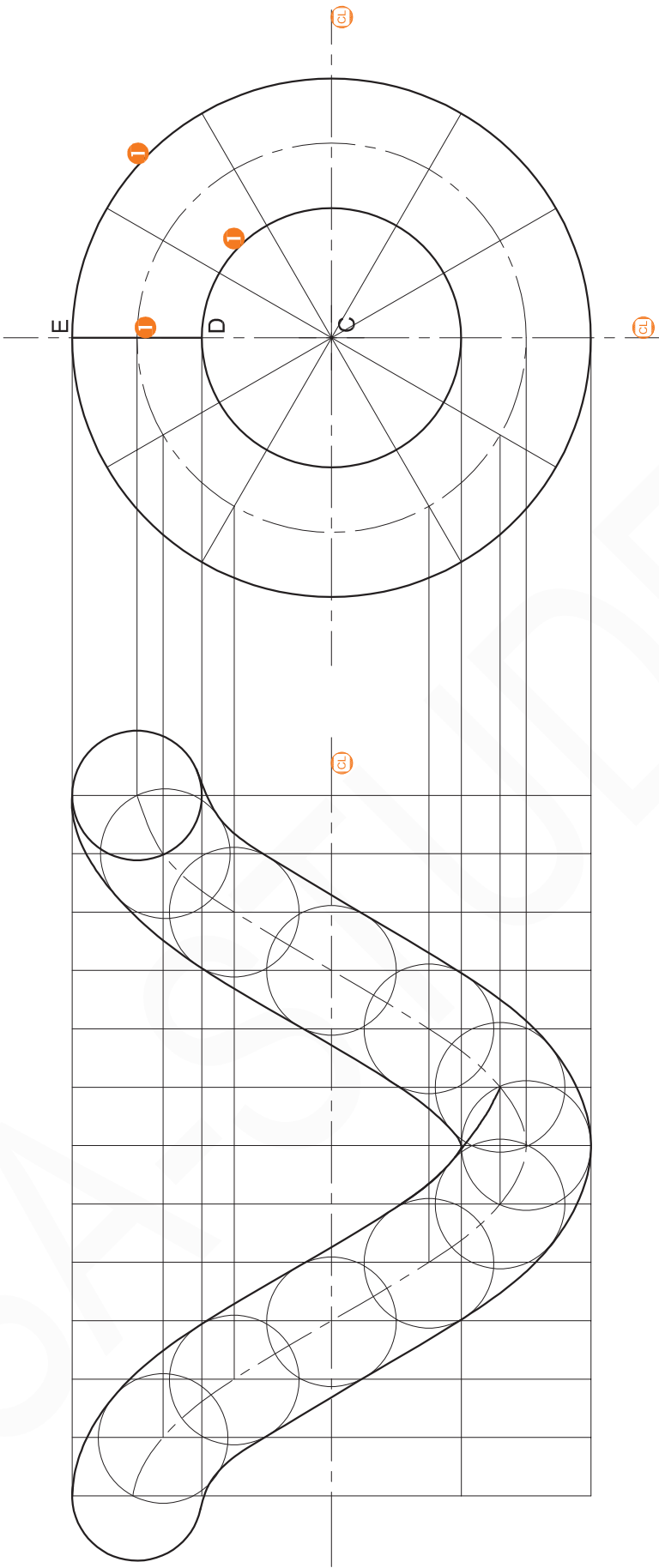


PAPER 2 QUESTION 2.2  
GRADE 12  
NOVEMBER 2018  
MARKING GUIDELINE



| ASSESSMENT CRITERIA |                |                 |
|---------------------|----------------|-----------------|
| 1                   | CONSTRUCTION   | 7 $\frac{1}{2}$ |
| 2                   | POINTS + CURVE | 9 $\frac{1}{2}$ |
| 3                   | LABELS         | 1               |
| SUBTOTAL 2.1        |                | 18              |

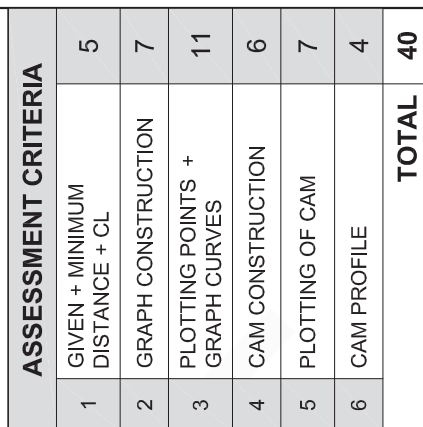
PAPER 2 QUESTION 2.1  
GRADE 12  
SCE 2018  
MARKING GUIDELINES



| 2 CONSTRUCTION                                   |                 |
|--------------------------------------------------|-----------------|
| - PROFILE CENTRE                                 | 1               |
| - CIRCLE DIVISIONS                               | 1               |
| - PITCH                                          | 1               |
| - LINE DIVISION                                  | 1               |
| - VERTICAL PROJECTION                            | 1               |
| - HORIZONTAL PROJECTION                          | 1               |
|                                                  | <hr/> 6         |
| 3 FRONT VIEW                                     |                 |
| - CORRECTLY PLACED CIRCLES (13 x $\frac{1}{2}$ ) | 6 $\frac{1}{2}$ |
| - INDICATION DIRECTION                           | 2               |
| - CURVES (4 x $\frac{1}{2}$ )                    | 2               |
| - START + FINISH                                 | 1 $\frac{1}{2}$ |
|                                                  | <hr/> 12        |

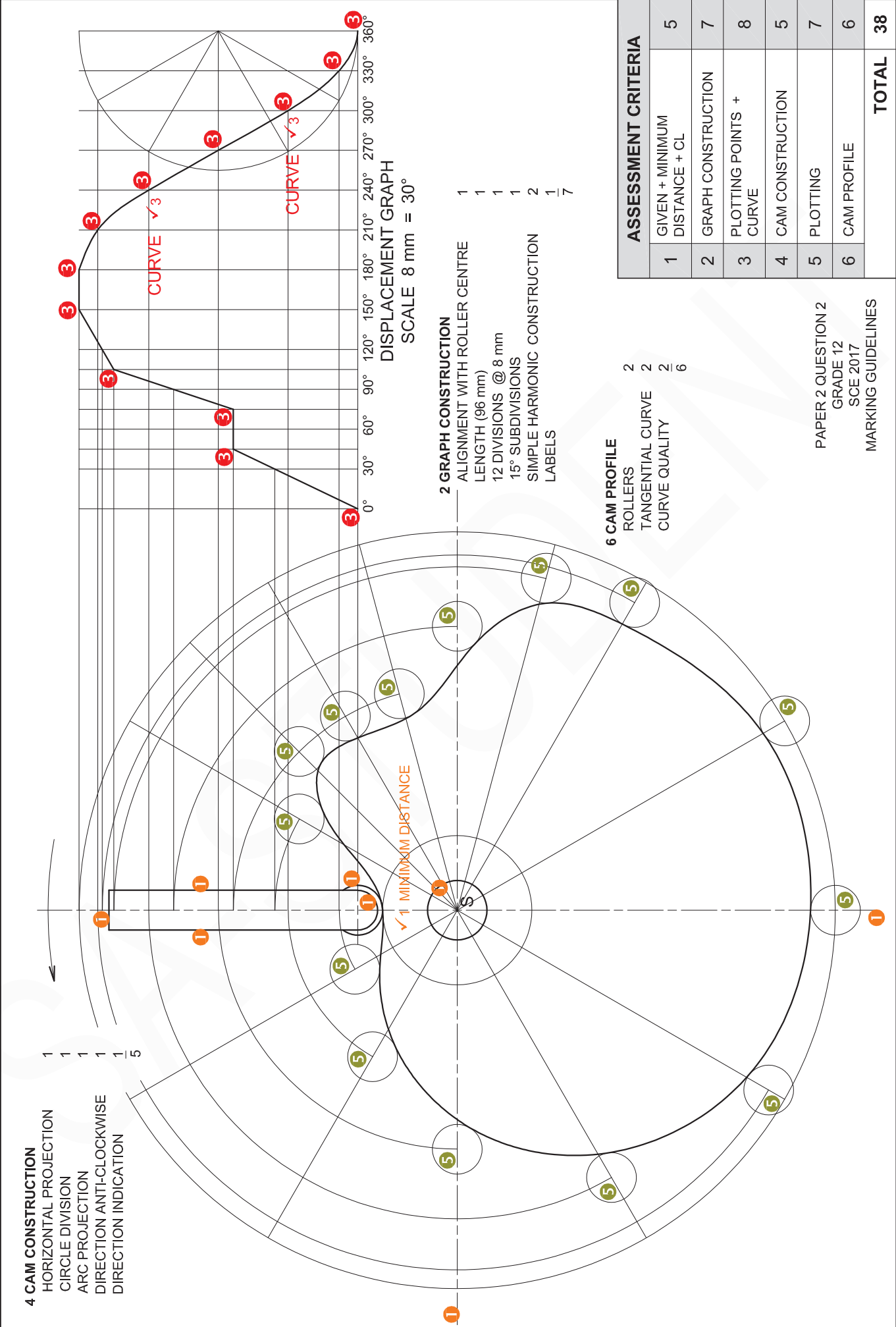
| ASSESSMENT CRITERIA |                      |    |    |
|---------------------|----------------------|----|----|
| 1                   | GIVEN + CENTRE LINES | 3  |    |
| 2                   | CONSTRUCTION         | 6  |    |
| 3                   | FRONT VIEW           | 12 |    |
| 2.2 SUBTOTAL        |                      |    | 21 |

PAPER 2 QUESTION 2.2  
GRADE 12  
SCE 2018  
MARKING GUIDELINES



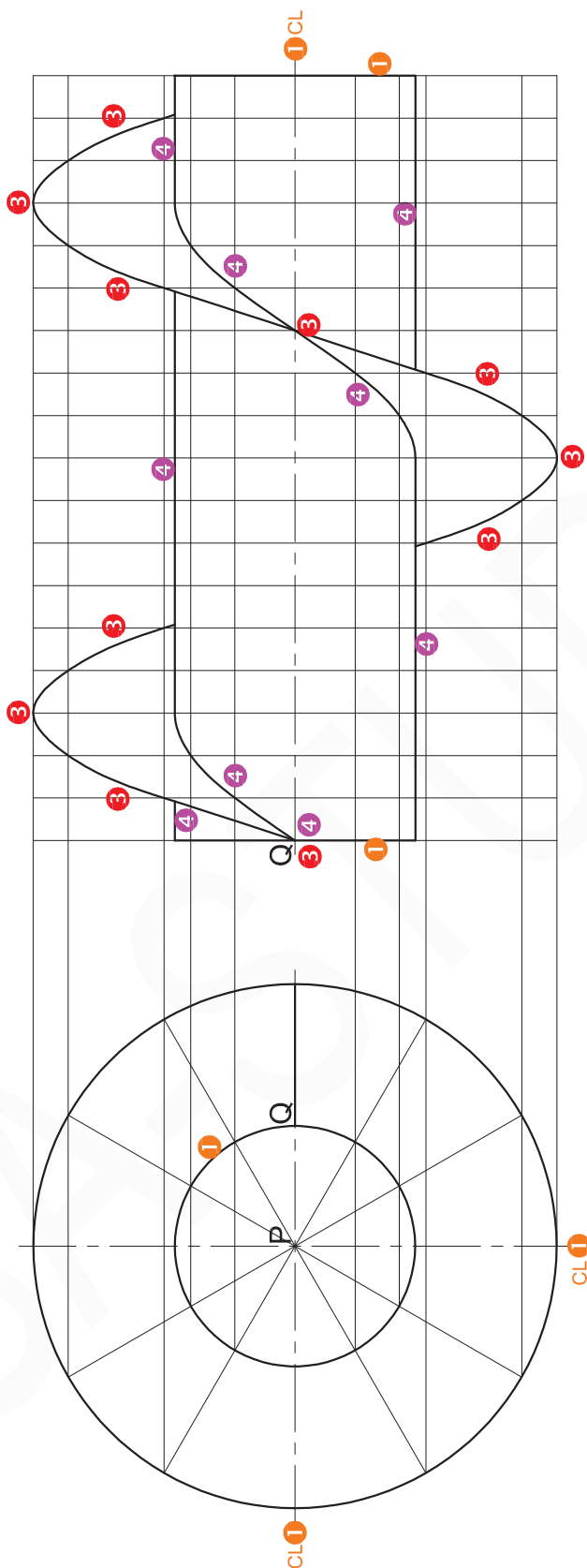
6 CAM PROFILE  
CURVE THROUGH POINTS 2  
CURVE QUALITY 2  $\frac{2}{4}$

PAPER 2 QUESTION 2  
GRADE 12  
November 2017  
MARKING GUIDELINES



| ASSESSMENT CRITERIA |                               |
|---------------------|-------------------------------|
| 1                   | GIVEN + MINIMUM DISTANCE + CL |
| 2                   | GRAPH CONSTRUCTION            |
| 3                   | PLOTTING POINTS + CURVE       |
| 4                   | CAM CONSTRUCTION              |
| 5                   | PLOTTING                      |
| 6                   | CAM PROFILE                   |
| TOTAL               |                               |
| 38                  |                               |

PAPER 2 QUESTION 2  
GRADE 12  
SCE 2017  
MARKING GUIDELINES



5✓✓ CURVE QUALITY FOR BOTH HELICES

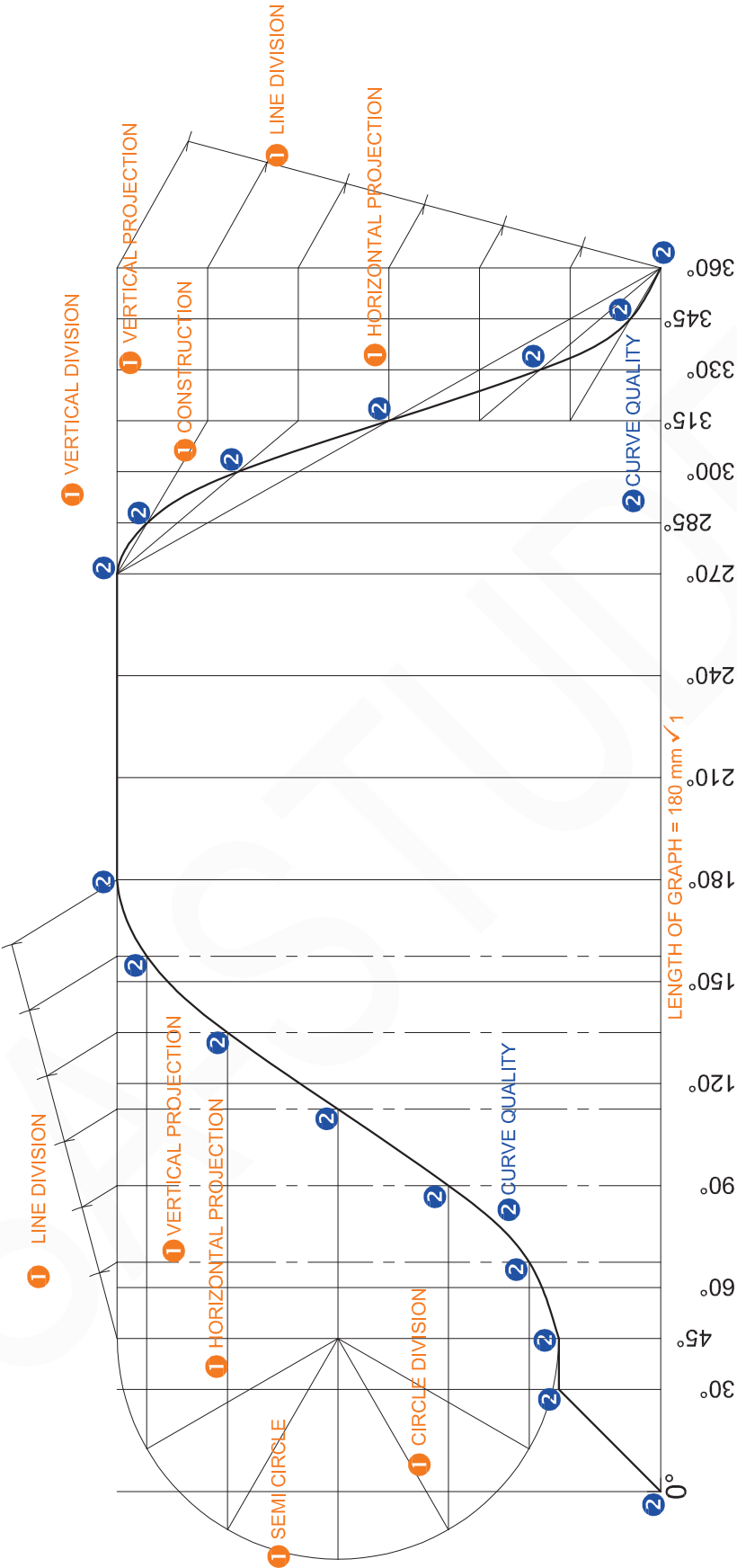
2. CONSTRUCTION
- OUTER CIRCLE (NOMINAL DIAMETER) 1
  - STARTING POSITION ON Q 1
  - CIRCLE DIVISION 1
  - PITCH + LINE DIVISION 2
  - VERTICAL PROJECTION 1
  - HORIZONTAL PROJECTION 1
  - DIRECTION 1
- 8

| ASSESSMENT CRITERIA 2.1 |                           |
|-------------------------|---------------------------|
| 1                       | GIVEN + CENTRE LINES 3    |
| 2                       | CONSTRUCTION 8            |
| 3                       | OUTER HELIX 5 1/2         |
| 4                       | INNER HELIX + SHAFT 4 1/2 |
| 5                       | CURVE QUALITY 2           |
| SUBTOTAL 23             |                           |

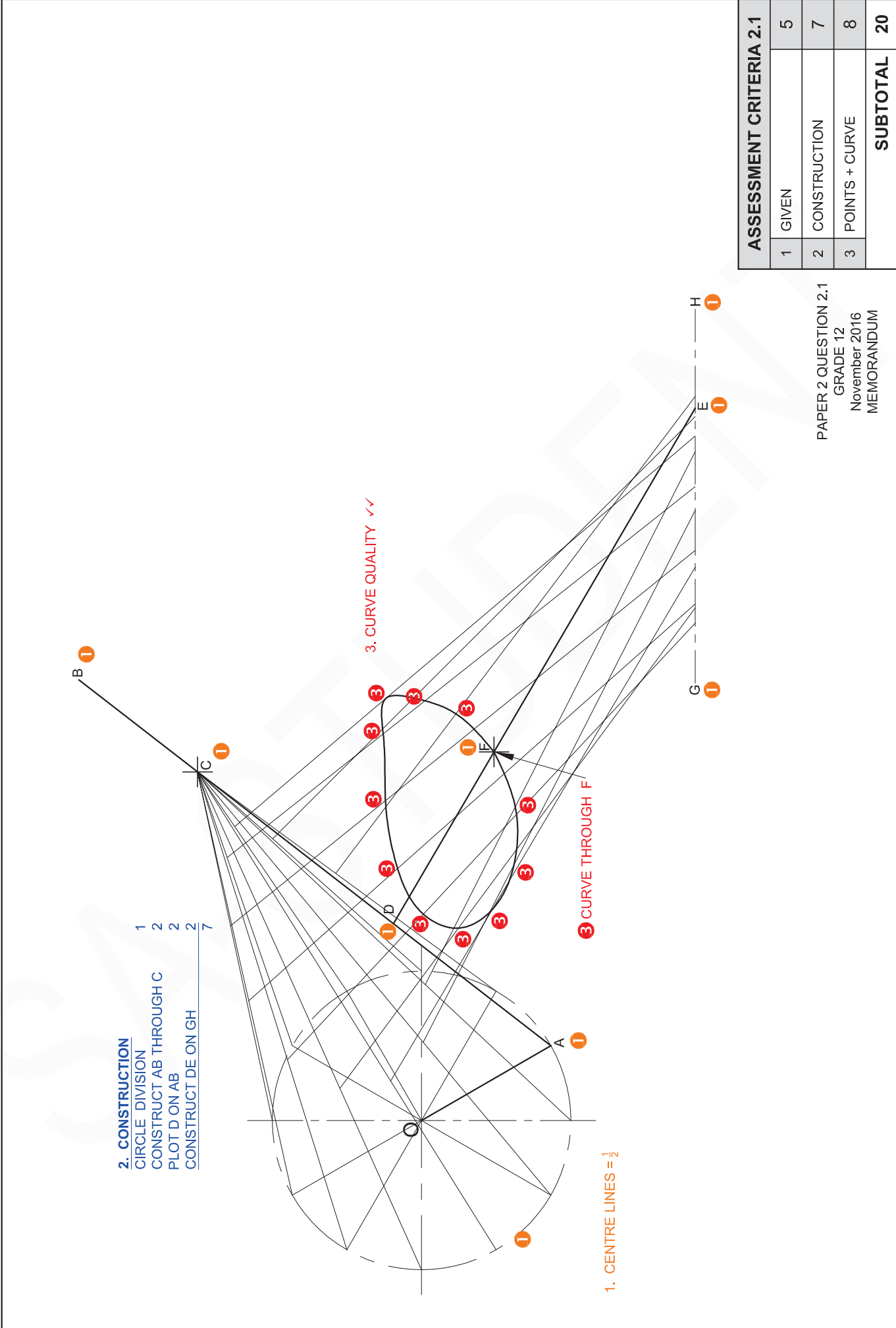
PAPER 2 QUESTION 2.1  
GRADE 12  
Feb./Mar. 2017  
MEMORANDUM

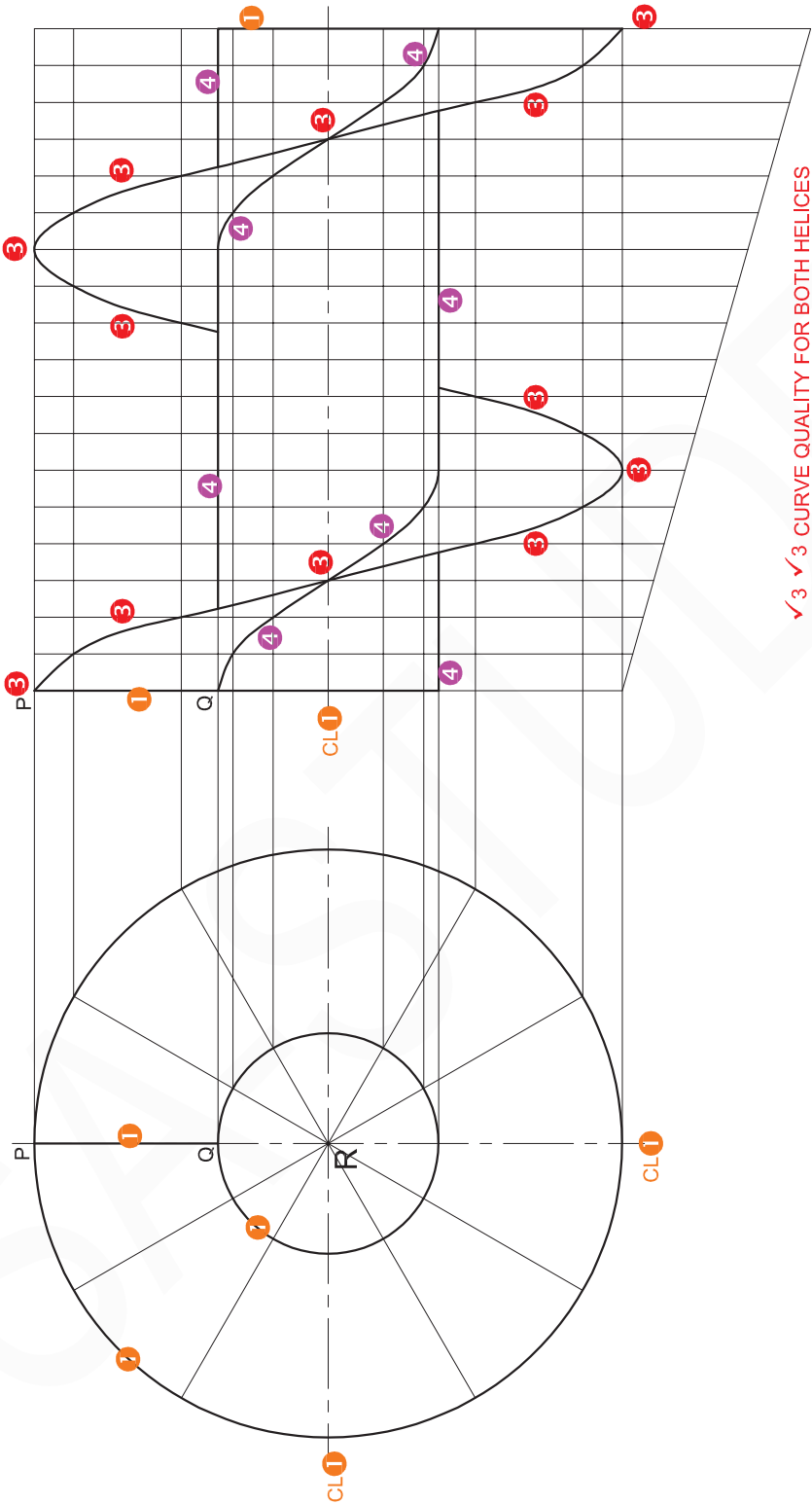
| ASSESSMENT CRITERIA 2.2 |                 |
|-------------------------|-----------------|
| 1                       | CONSTRUCTION    |
| 2                       | POINTS + CURVES |
| 3                       | LABELS          |
| PENALTIES (-)           |                 |
| SUBTOTAL                |                 |
| 16                      |                 |

PAPER 2 QUESTION 2.2  
GRADE 12  
Feb./Mar. 2017  
MEMORANDUM



GRAPH OF DISPLACEMENT 3  
HORIZONTAL SCALE - 180mm = 360° 3



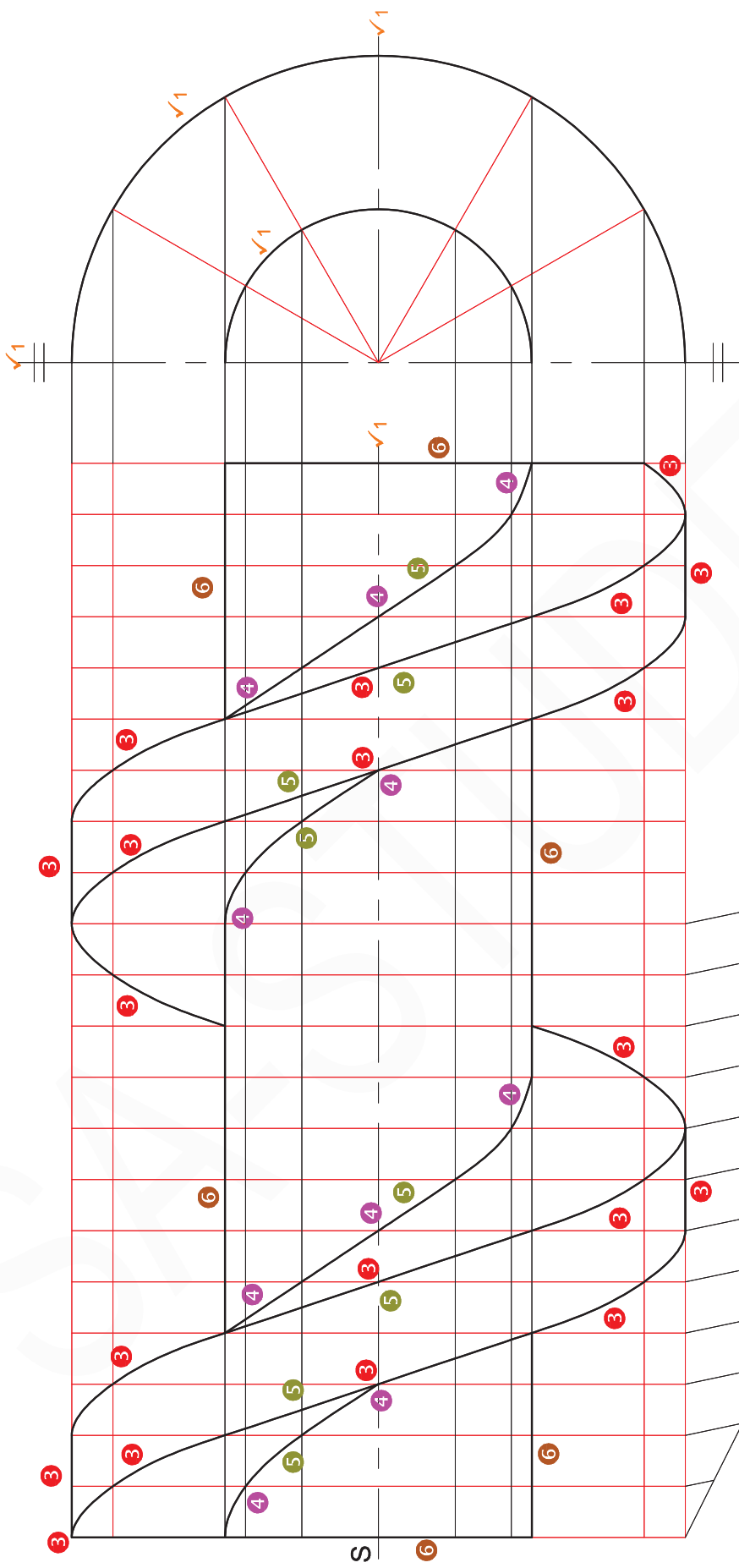


✓ 3 ✓ 3 CURVE QUALITY FOR BOTH HELICES

**2. CONSTRUCTION**  
CIRCLE DIVISION 1  
PITCH + LINE DIVISION 2  
VERTICAL DIVISION 1  
HORIZONTAL PROJECTION 1  
DIRECTION 1  
6

| ASSESSMENT CRITERIA 2.2 |                             |   |  |    |
|-------------------------|-----------------------------|---|--|----|
| 1                       | GIVEN + CENTRE LINES        | 4 |  |    |
| 2                       | CONSTRUCTION                | 6 |  |    |
| 3                       | OUTER HELIX + CURVE QUALITY | 8 |  |    |
| 4                       | INNER HELIX + SHAFT         | 4 |  |    |
| SUBTOTAL                |                             |   |  | 22 |

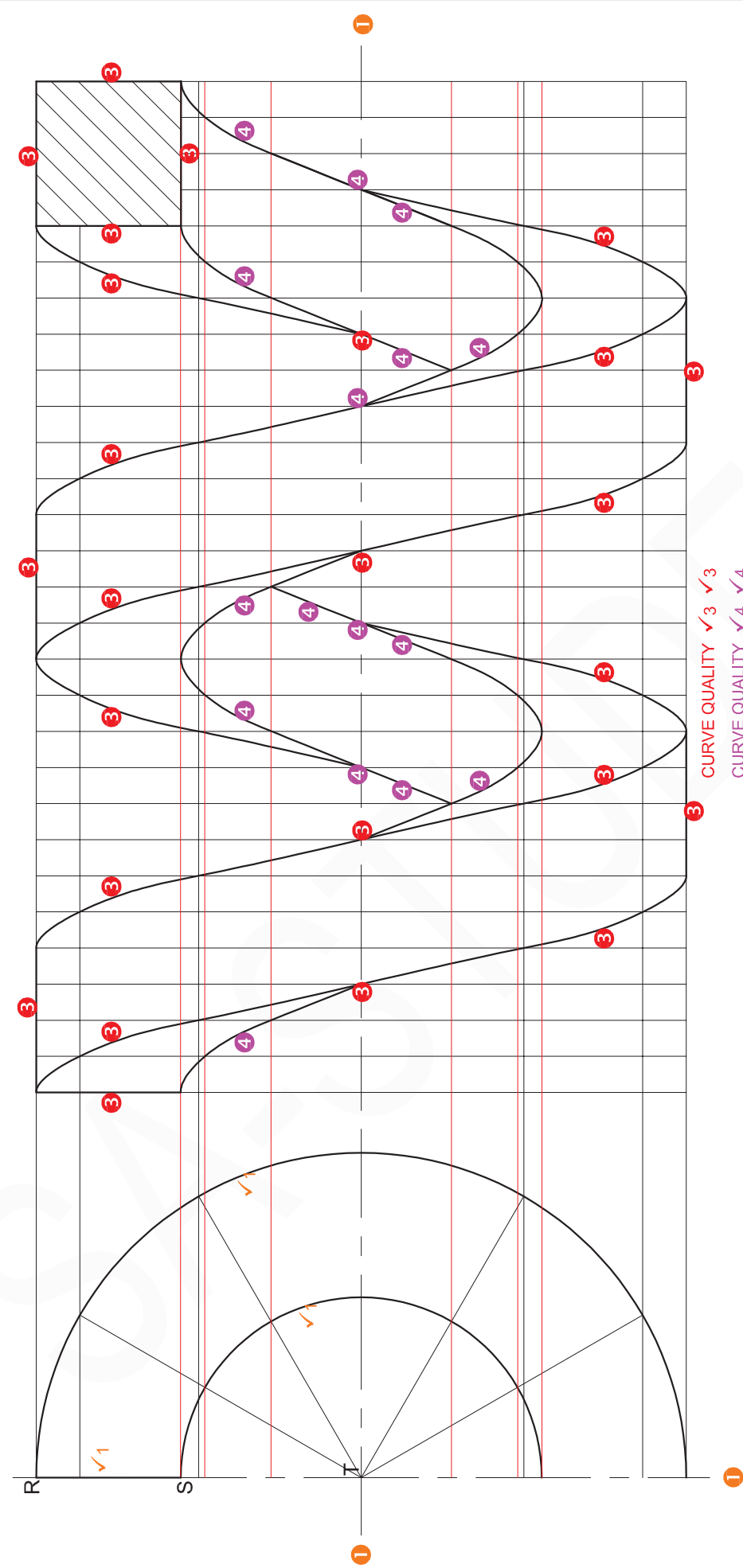
PAPER 2 QUESTION 2.2  
GRADE 12  
November 2016  
MEMORANDUM



| ASSESSMENT CRITERIA |                           |    |
|---------------------|---------------------------|----|
| 1                   | RIGHT VIEW + CENTRE LINES | 5  |
| 2                   | CONSTRUCTION              | 5  |
| 3                   | OUTER CURVE POINTS        | 10 |
| 4                   | INNER CURVE POINTS        | 5  |
| 5                   | CURVE QUALITY             | 4  |
| 6                   | CORE                      | 3  |
| TOTAL               |                           | 32 |

2. CONSTRUCTION
- CIRCLE DIVISION 1
  - PITCH 1
  - LINE DIVISION 1
  - VERTICAL PROJECTION 1
  - HORIZONTAL PROJECTION 1
- 5

PAPER 2 QUESTION 2  
GRADE 12  
DBE/Feb.-Mar. 2016  
MEMORANDUM



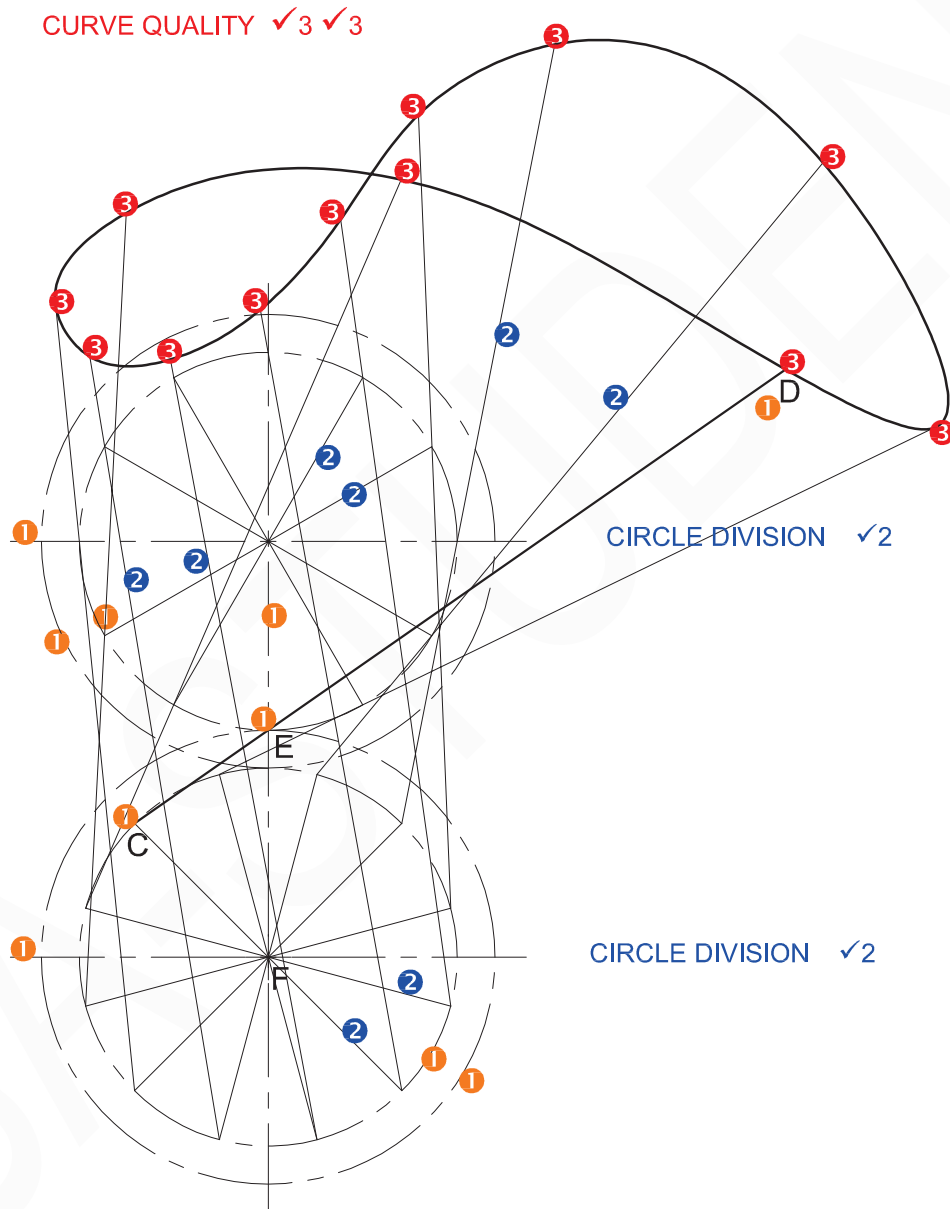
| ASSESSMENT CRITERIA |                                       |      |
|---------------------|---------------------------------------|------|
| 1                   | GIVEN + CENTRE LINES + STARTING POINT | 4 ½  |
| 2                   | CONSTRUCTION                          | 8    |
| 3                   | OUTSIDE POINTS + CURVE + QUALITY      | 14 ½ |
| 4                   | INSIDE POINTS + CURVE + QUALITY       | 10   |
| PENALTIES (-)       |                                       |      |
| TOTAL               |                                       | 37   |

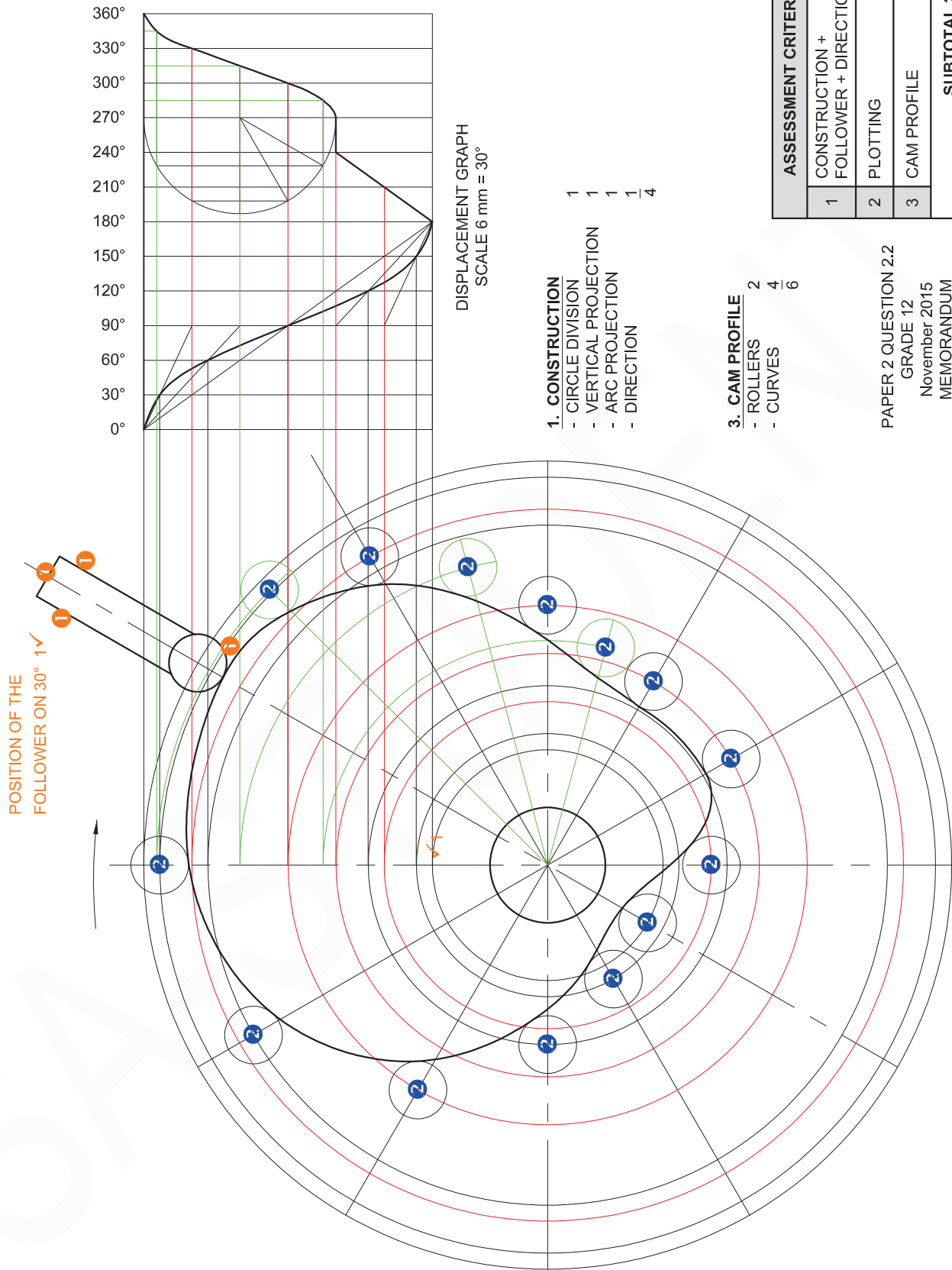
- CONSTRUCTION:**
- CIRCLE DIVISION 1
  - PITCH 1
  - HORIZONTAL PROJECTION INNER CIRCLE 1
  - HORIZONTAL PROJECTION OUTER CIRCLE 1
  - VERTICAL DIVISION FIRST TURN 1
  - VERTICAL DIVISION SECOND TURN 2
  - DIRECTION 8

CURVE QUALITY ✓ 3 ✓ 3  
CURVE QUALITY ✓ 4 ✓ 4

| ASSESSMENT CRITERIA 2.1 |                      |    |
|-------------------------|----------------------|----|
| 1                       | GIVEN + CENTRE LINES | 5  |
| 2                       | CONSTRUCTION         | 6  |
| 3                       | POINTS + CURVE       | 8  |
| SUBTOTAL 2.1            |                      | 19 |

PAPER 2 QUESTION 2.1  
GRADE 12  
November 2015  
MEMORANDUM





DISPLACEMENT GRAPH  
SCALE 6 mm = 30°

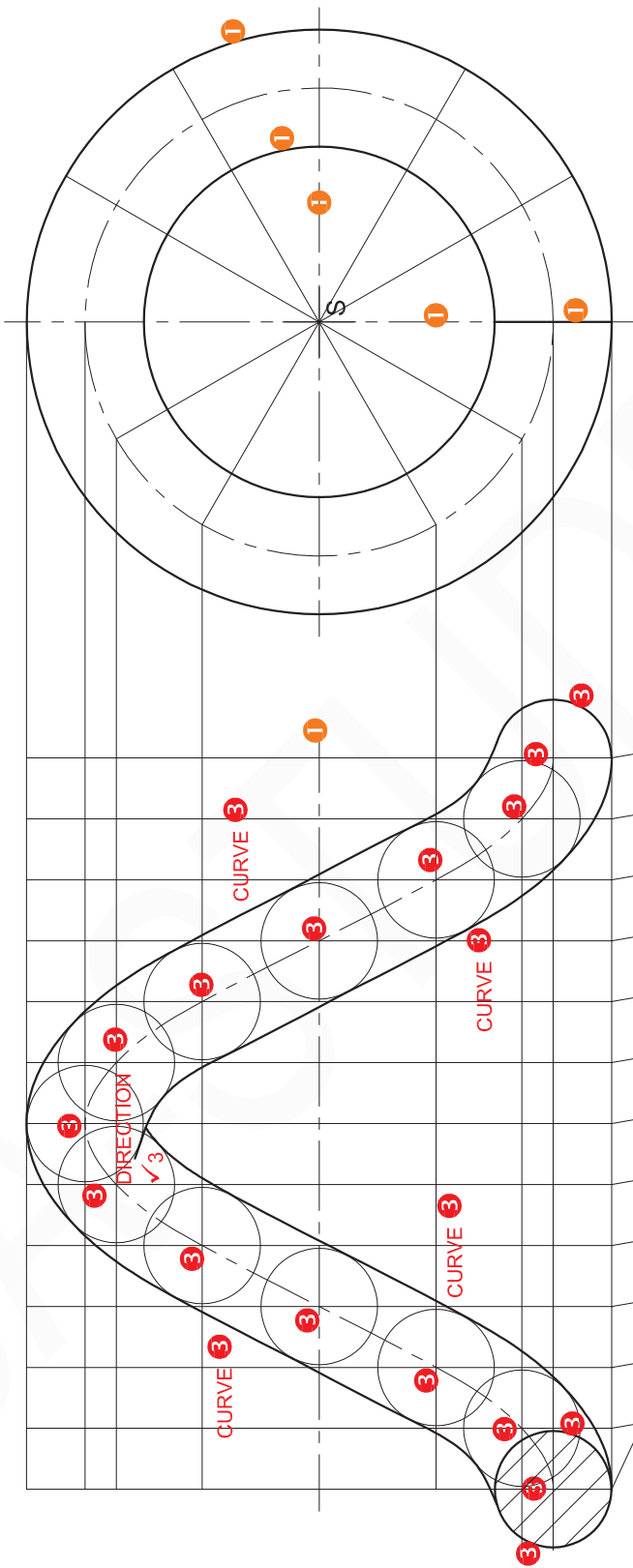
- 1. CONSTRUCTION**
- CIRCLE DIVISION 1
  - VERTICAL PROJECTION 1
  - ARC PROJECTION 1
  - DIRECTION 1 1/4

- 3. CAM PROFILE**
- ROLLERS 2
  - CURVES 4 1/6

| ASSESSMENT CRITERIA 2.2 |                                     |    |
|-------------------------|-------------------------------------|----|
| 1                       | CONSTRUCTION + FOLLOWER + DIRECTION | 8  |
| 2                       | PLOTTING                            | 7  |
| 3                       | CAM PROFILE                         | 6  |
| SUBTOTAL 2.2            |                                     | 21 |

PAPER 2 QUESTION 2.2  
GRADE 12  
November 2015  
MEMORANDUM

PROFILE CIRCLES (Ø16) ✓ 3



CONSTRUCTION:

- PROFILE CENTRE 1
- CIRCLE DIVISION 1
- PITCH 1
- LINE DIVISION 1
- VERTICAL PROJECTION 1
- HORIZONTAL PROJECTION 1

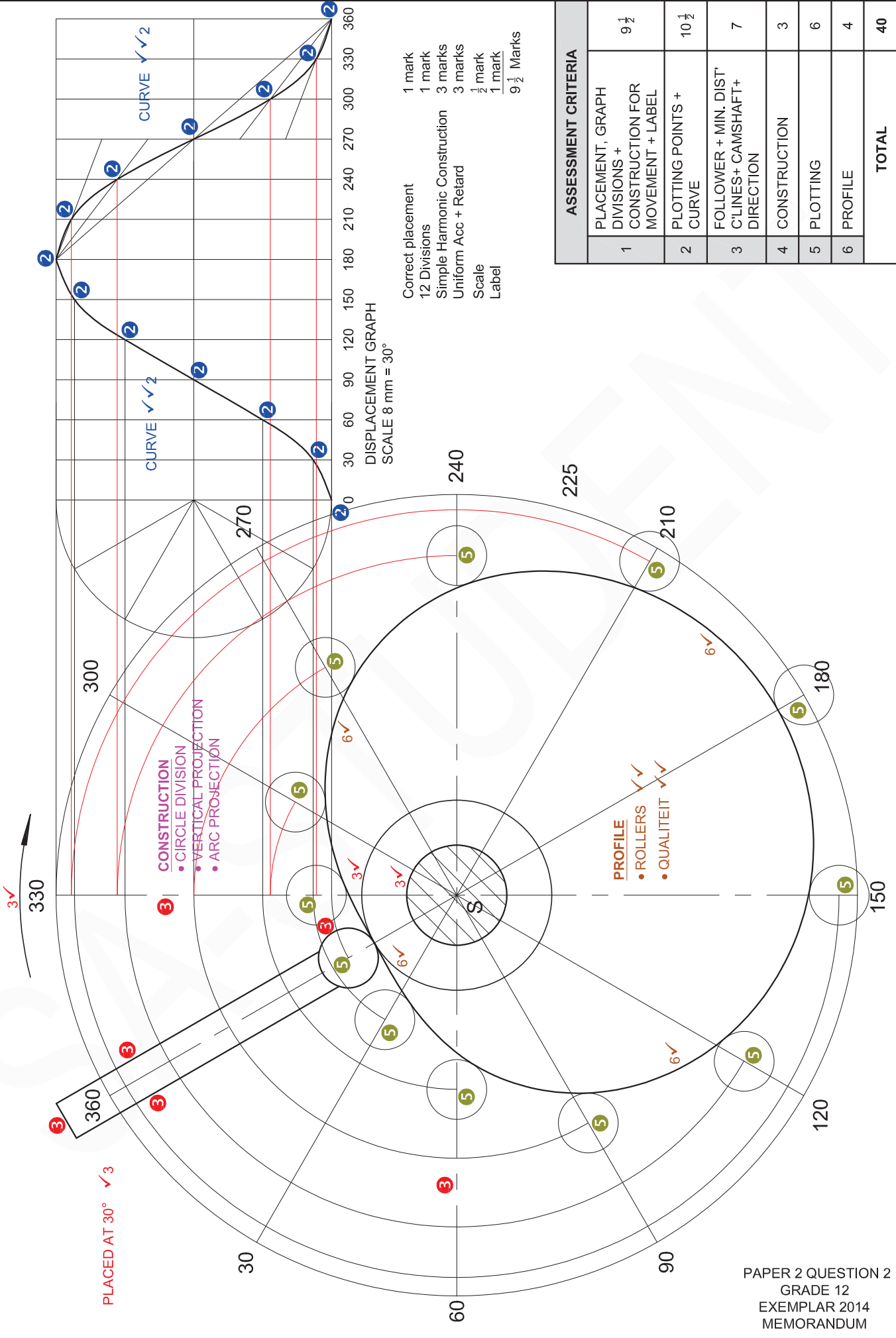
| ASSESSMENT CRITERIA |                        |
|---------------------|------------------------|
| 1                   | GIVEN + CENTRE LINES 3 |
| 2                   | CONSTRUCTION 6         |
| 3                   | POINTS + CURVES 12     |
| PENALTIES (-)       |                        |
| SUBTOTAL 2.1        |                        |
| 21                  |                        |

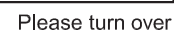
PAPER 2 QUESTION 2.1  
GRADE 12  
DBE/November 2014  
MEMORANDUM



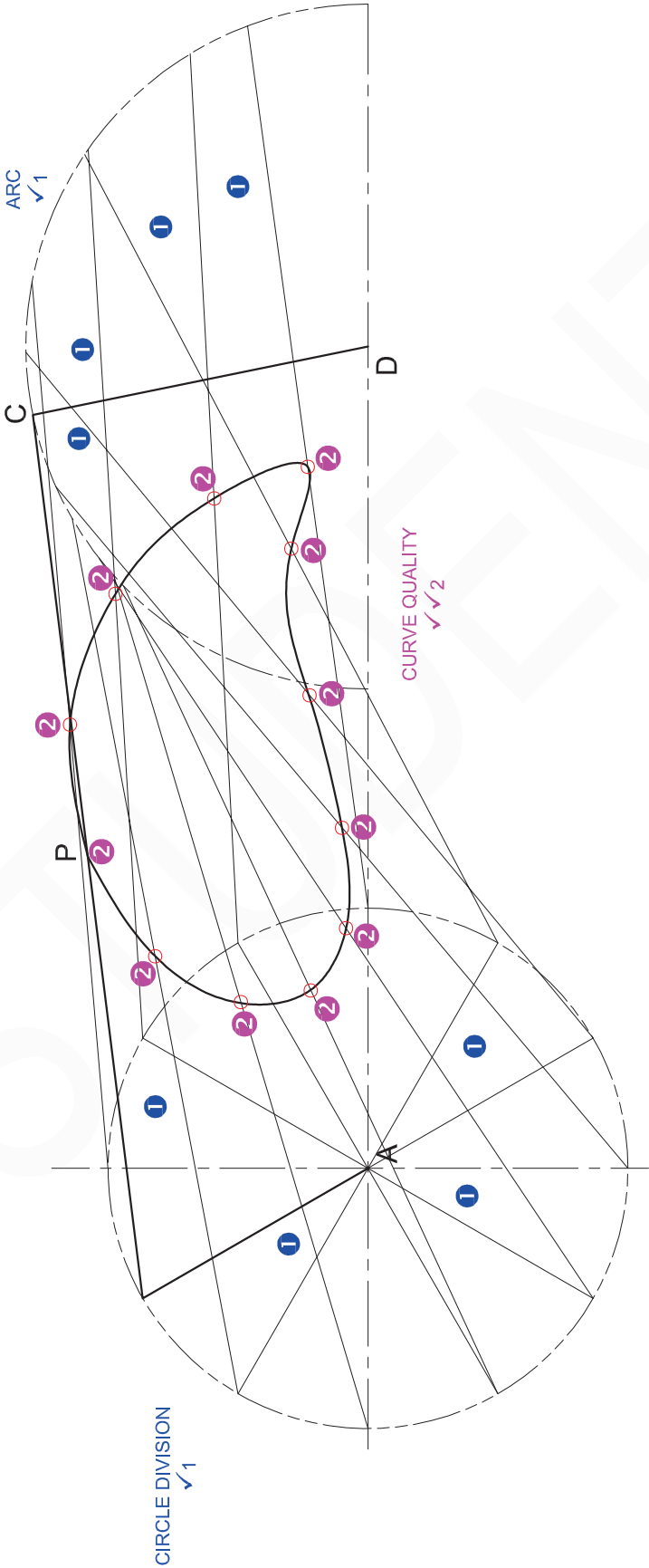
| ASSESSMENT CRITERIA |                 |
|---------------------|-----------------|
| 1                   | CONSTRUCTION    |
| 2                   | POINTS + CURVES |
| 3                   | LABELS          |
| PENALTIES (-)       |                 |
| 2.2 SUBTOTAL        |                 |
| 2.1 SUBTOTAL        |                 |
| TOTAL               |                 |

PAPER 2 QUESTION 2.2  
GRADE 12  
DBE/November 2014  
MEMORANDUM

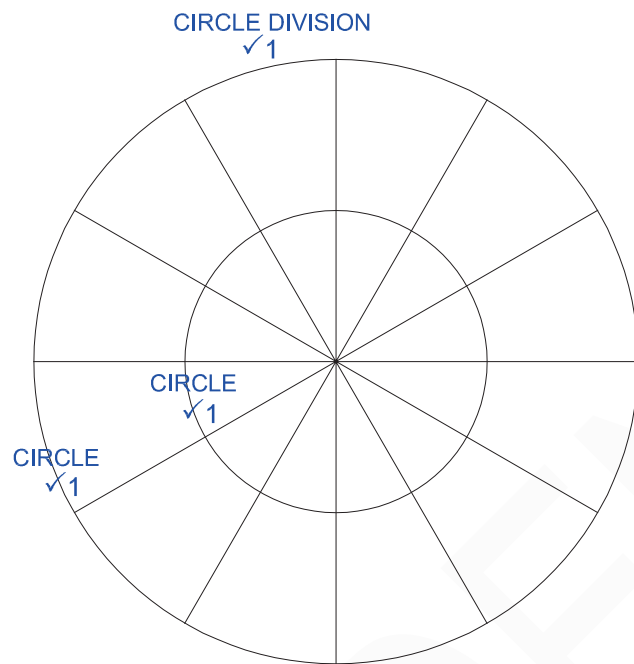




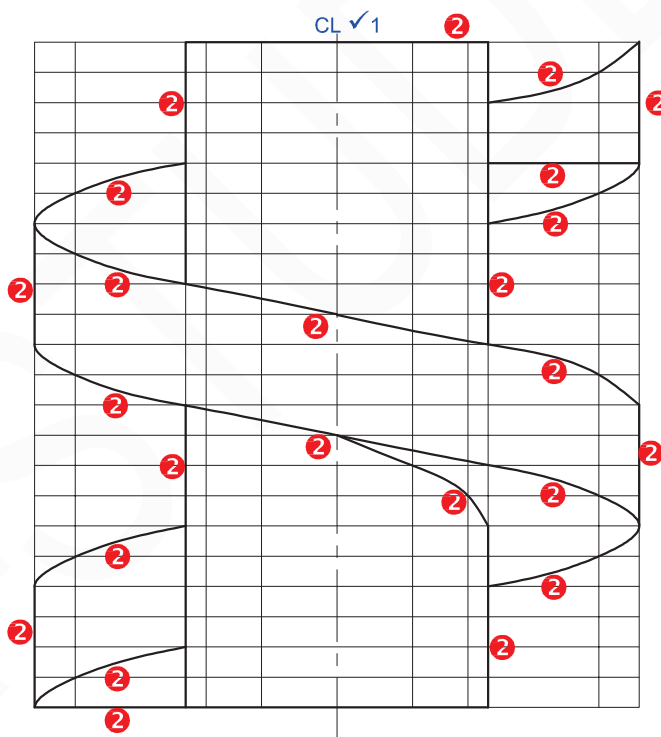
| ASSESSMENT CRITERIA |              |    |
|---------------------|--------------|----|
| 1                   | CONSTRUCTION | 6  |
| 2                   | LOCUS OF P   | 8  |
| SUBTOTAL            |              | 14 |



PAPER 2 QUESTION 2.1  
GRADE 12  
November 2013  
MEMORANDUM

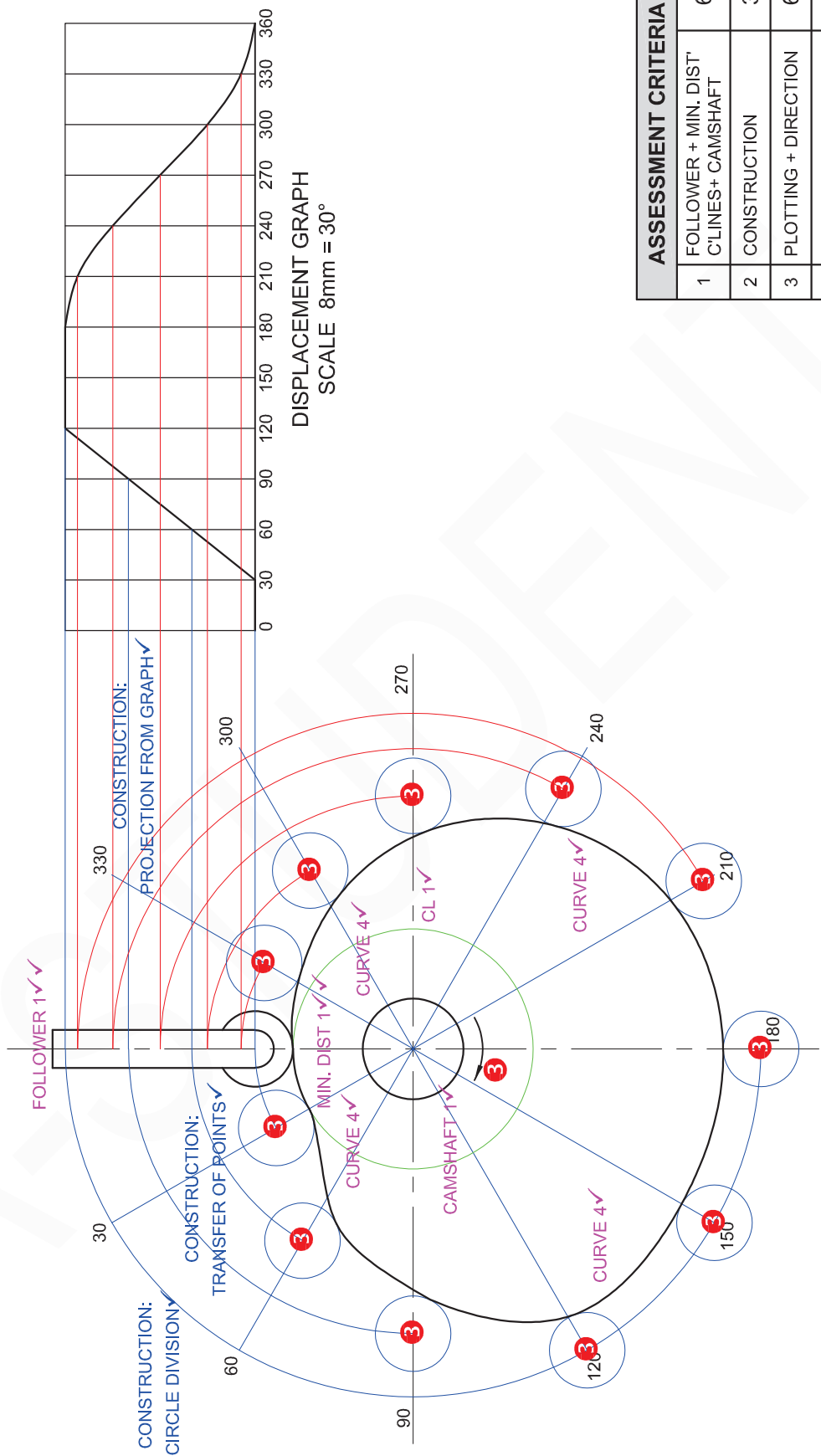


PITCH ✓1  
 HORIZONTAL DIVISION ✓1  
 VERTICAL PROJECTION ✓1  
 LEFT HAND ✓1

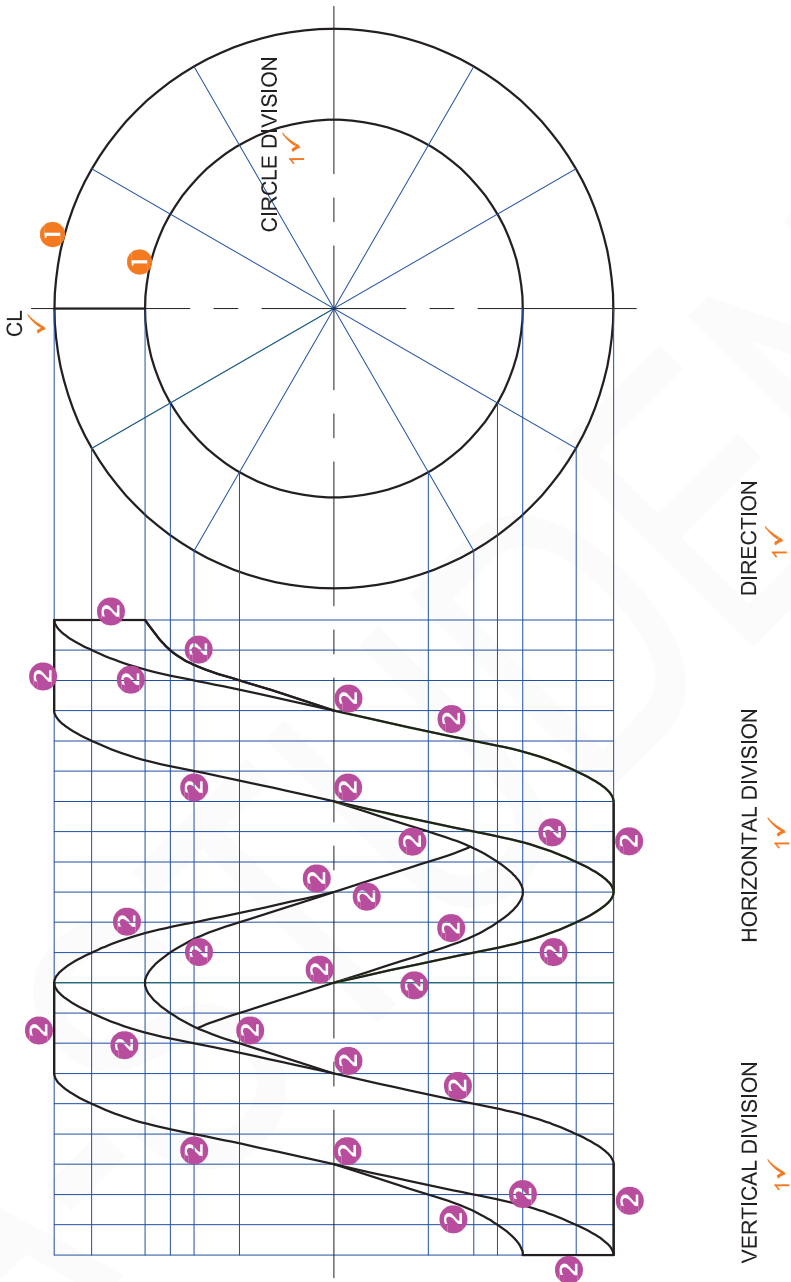
**ASSESSMENT CRITERIA**

|                 |                   |           |
|-----------------|-------------------|-----------|
| 1               | CL + CONSTRUCTION | 8         |
| 2               | CHUTE             | 12        |
| <b>SUBTOTAL</b> |                   | <b>20</b> |

PAPER 2 QUESTION 2.2  
 GRADE 12  
 November 2013  
 MEMORANDUM

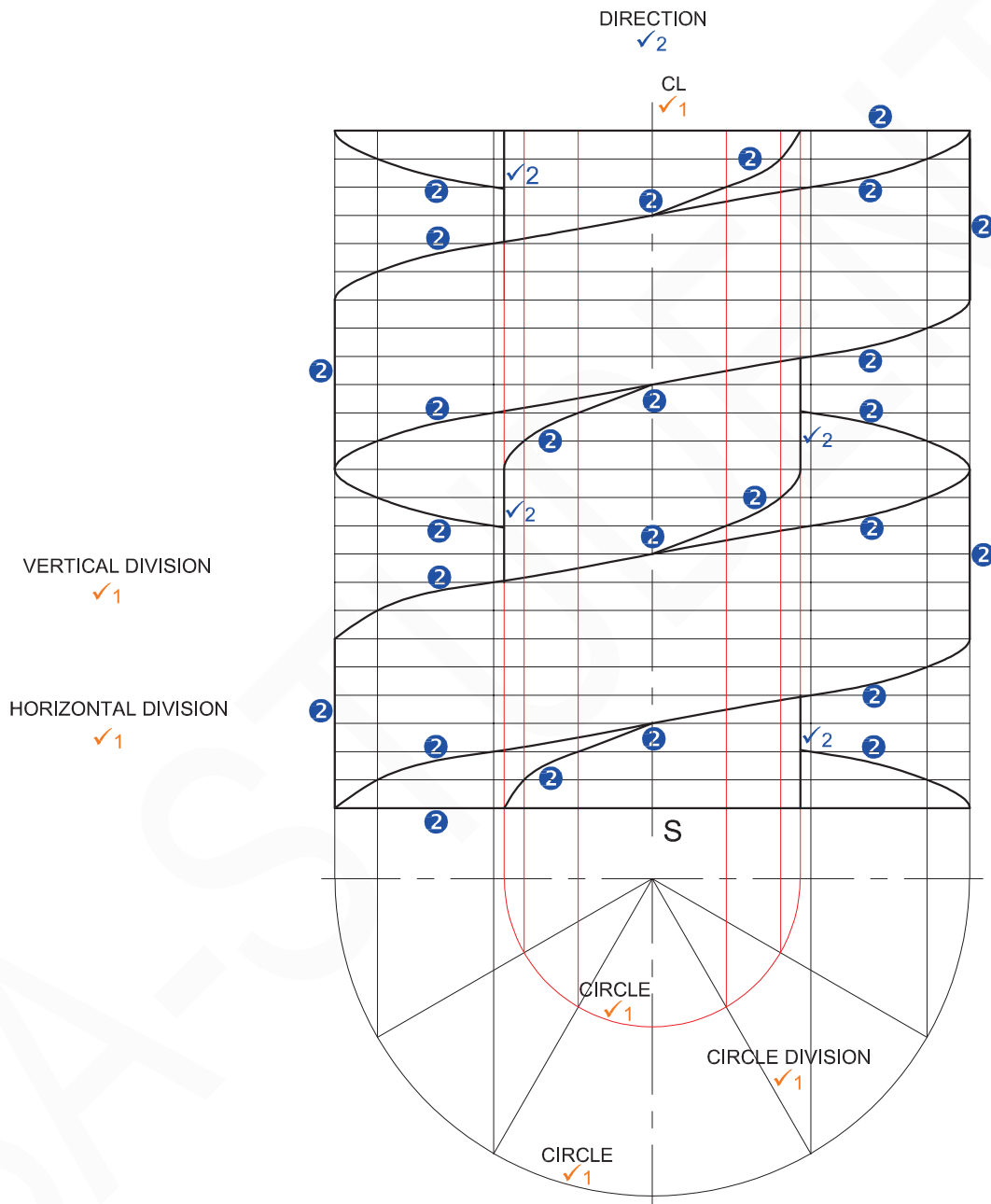


| ASSESSMENT CRITERIA |                                         |    |
|---------------------|-----------------------------------------|----|
| 1                   | FOLLOWER + MIN. DIST' C'LINES+ CAMSHAFT | 6  |
| 2                   | CONSTRUCTION                            | 3  |
| 3                   | PLOTTING + DIRECTION                    | 6  |
| 4                   | CURVE                                   | 4  |
|                     | SUBTOTAL                                | 19 |



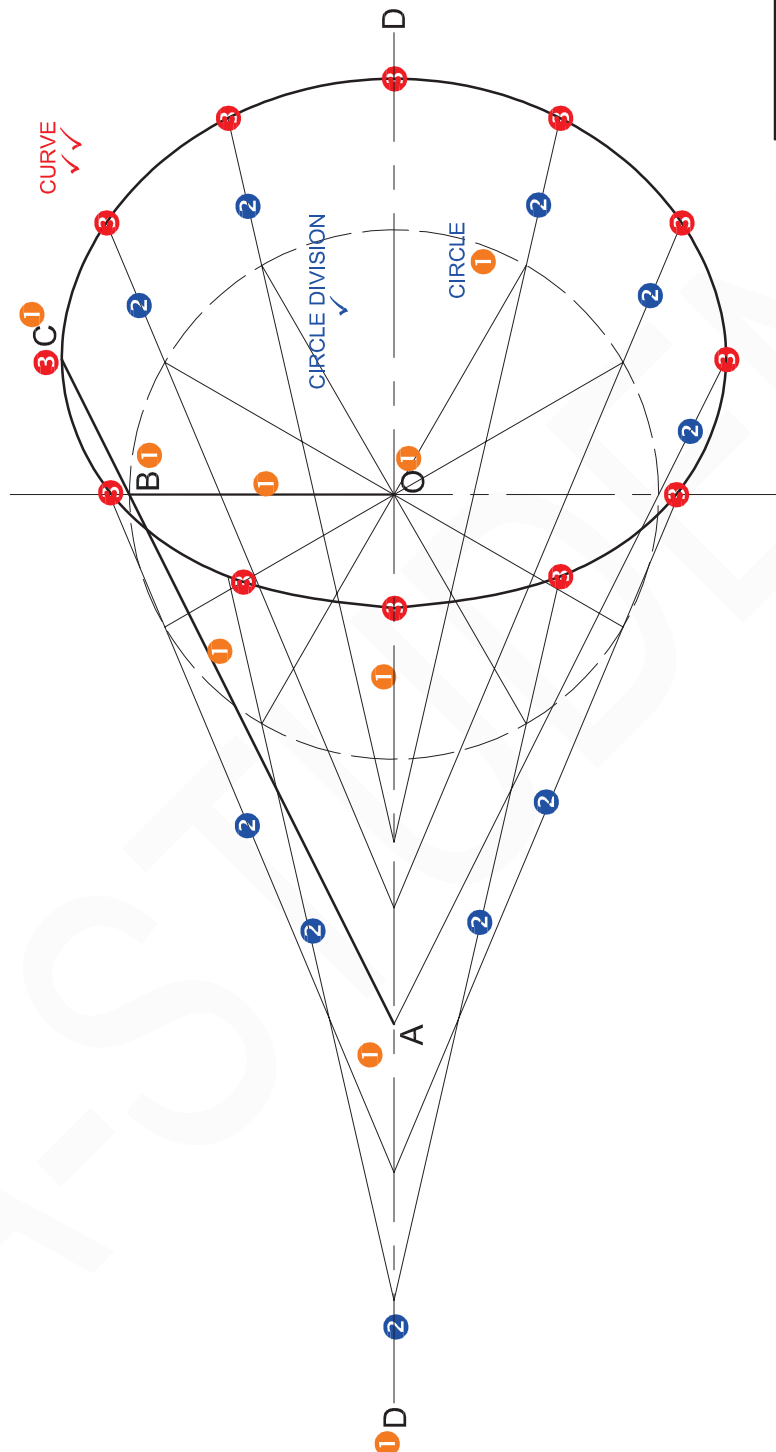
| ASSESSMENT CRITERIA |                |    |
|---------------------|----------------|----|
| 1                   | CONSTRUCTION   | 6  |
| 2                   | POINTS + CURVE | 15 |
| SUBTOTAL            |                | 21 |

PAPER 2 QUESTION 2.2  
GRADE 12  
FEB. - MAR. 2013  
MEMORANDUM

**ASSESSMENT CRITERIA**

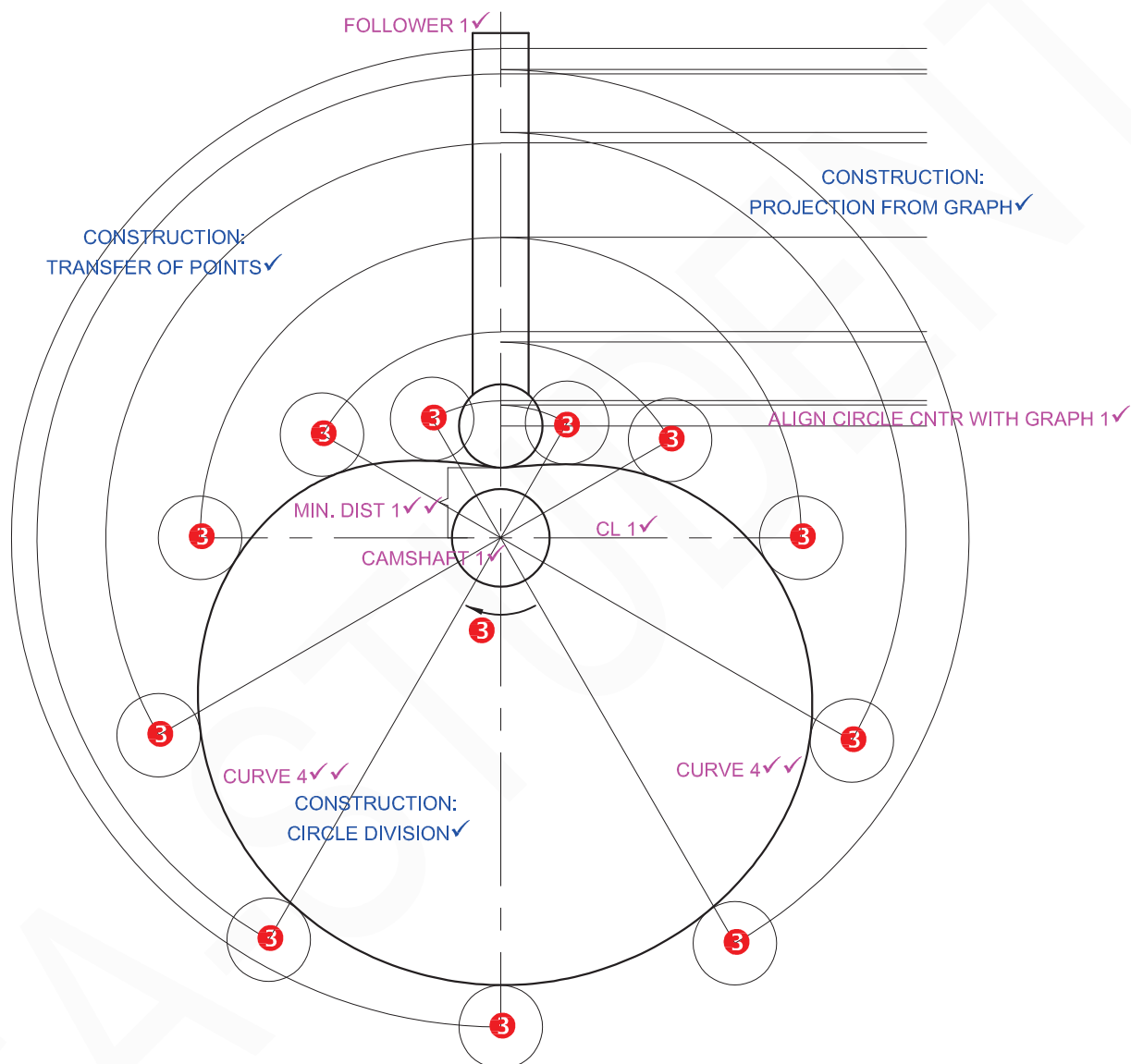
|   |                             |           |
|---|-----------------------------|-----------|
| 1 | CENTRE LINES + CONSTR'      | 6         |
| 2 | HELICES + SHAFT + DIRECTION | 18        |
|   | <b>SUBTOTAL</b>             | <b>24</b> |

PAPER 2 QUESTION 2.1  
GRADE 12  
NOVEMBER 2012  
MEMORANDUM



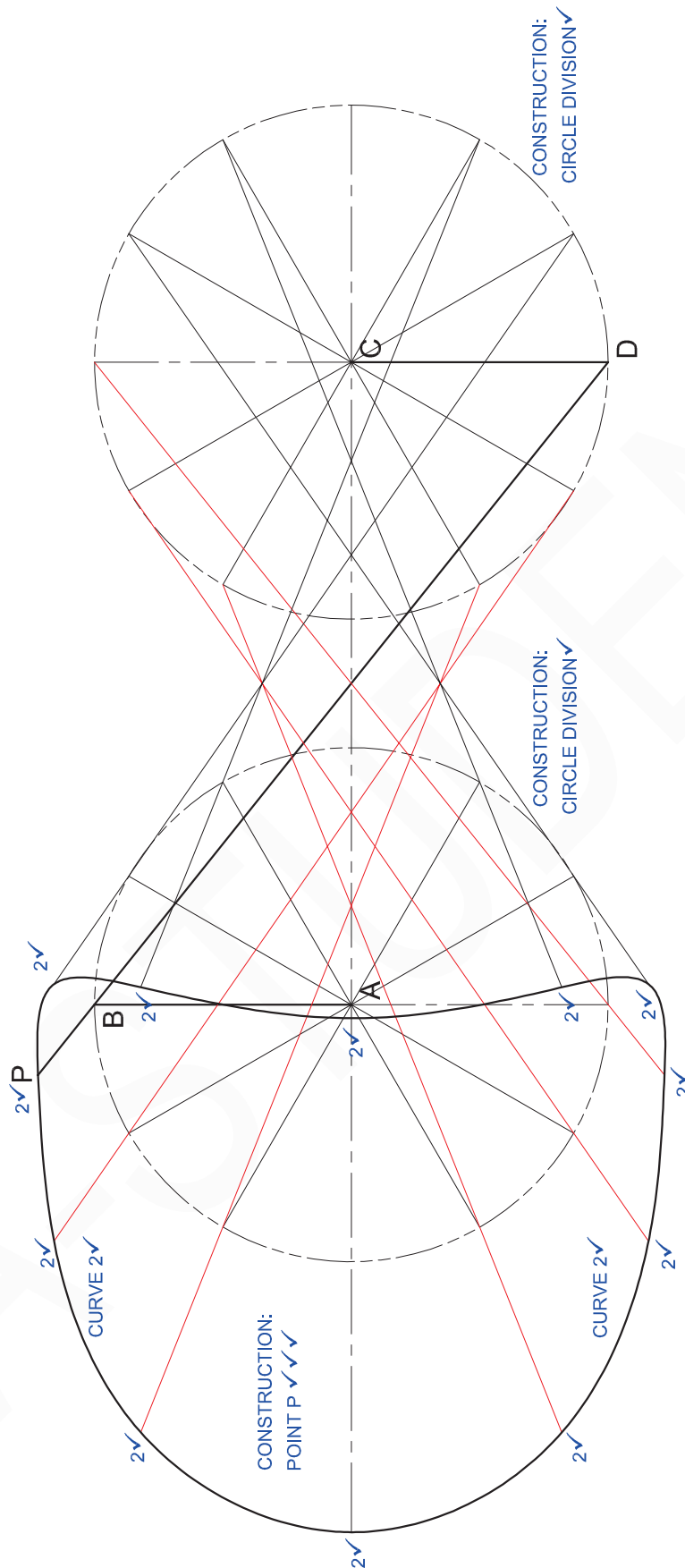
| ASSESSMENT CRITERIA |               |    |
|---------------------|---------------|----|
| 1                   | GIVEN         | 4  |
| 2                   | CONSTRUCTION  | 6  |
| 3                   | LOCUS + CURVE | 8  |
| SUBTOTAL            |               | 18 |
| TOTAL               |               | 42 |

Please turn over

**ASSESSMENT CRITERIA**

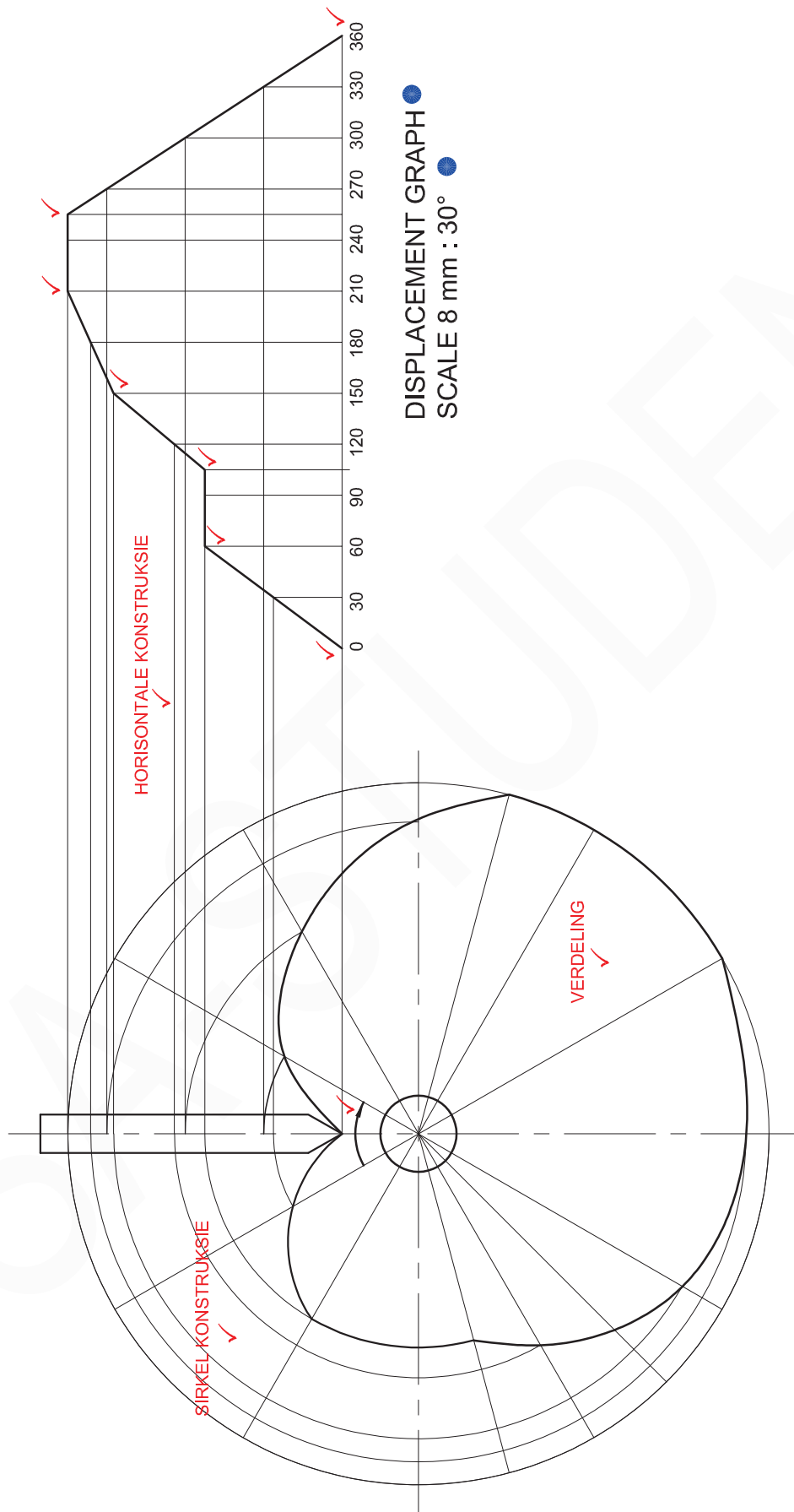
|                                                  |           |
|--------------------------------------------------|-----------|
| 1. FOLLOWER + MIN. DIST + CENTRE LINE + CAMSHAFT | 6         |
| 2. CONSTRUCTION                                  | 3         |
| 3. PLOTTING + DIRECTION                          | 6         |
| 4. CURVE                                         | 4         |
| <b>2.1 SUBTOTAL</b>                              | <b>19</b> |

PAPER 2 QUESTION 2.1  
 GRADE 12  
 Feb.-Mar. 2012  
 MEMORANDUM



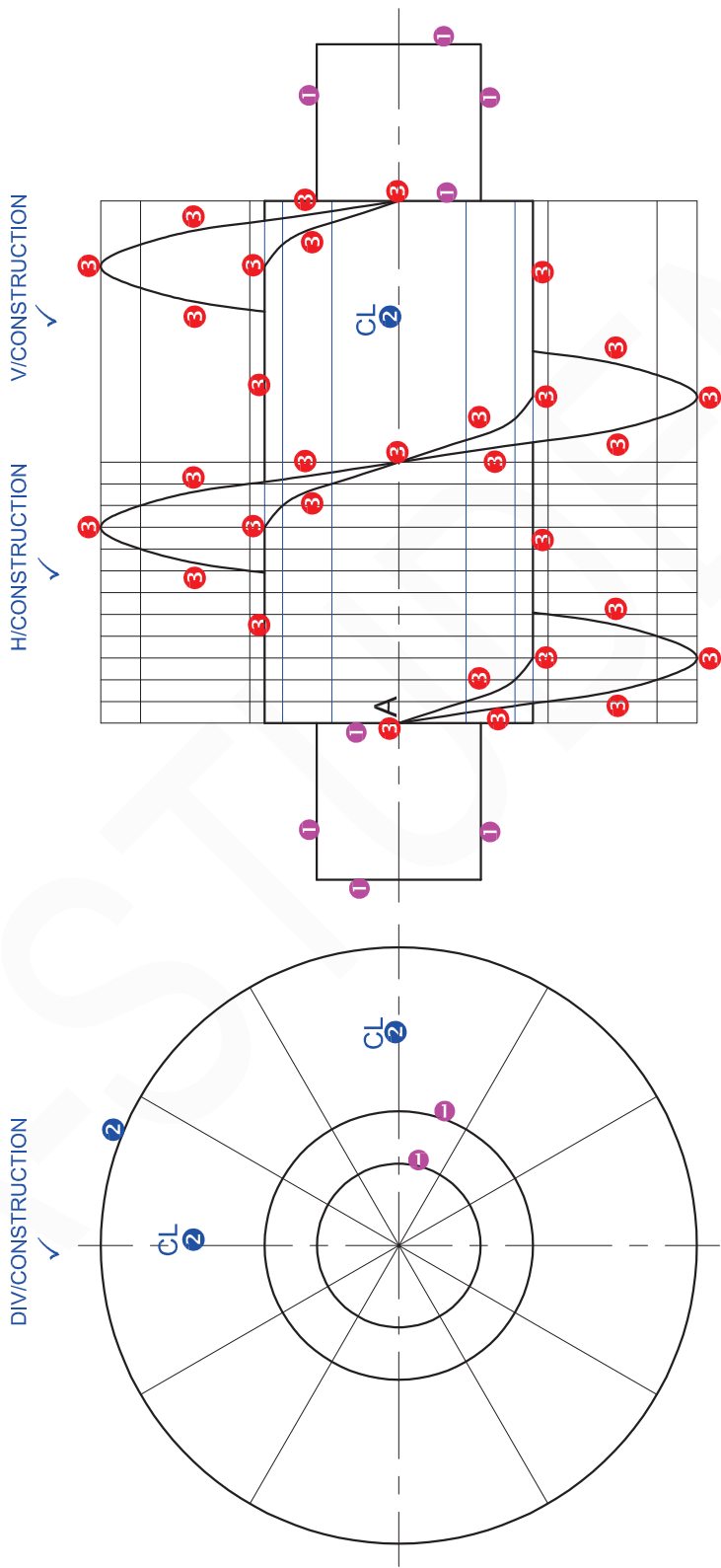
| ASSESSMENT CRITERIA |           |
|---------------------|-----------|
| 1. CONSTRUCTION     | 5         |
| 2. LOCUS OF P       | 14        |
| <b>2.2 SUBTOTAL</b> | <b>19</b> |

PAPER 2 QUESTION 2.2  
GRADE 12  
Feb.-Mar. 2012  
MEMORANDUM

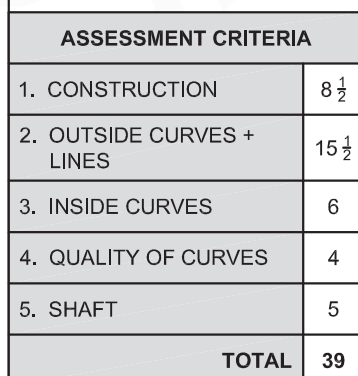


| ASSESSMENT CRITERIA |             |
|---------------------|-------------|
| DISPLACEMENT GRAPH  | = 7         |
| CONSTRUCTION        | = 3         |
| LABELS + ARROW      | = 2         |
| <b>TOTAL</b>        | <b>= 12</b> |

PAPER 2 QUESTION 2  
GRADE 12  
NOVEMBER  
MEMORANDUM

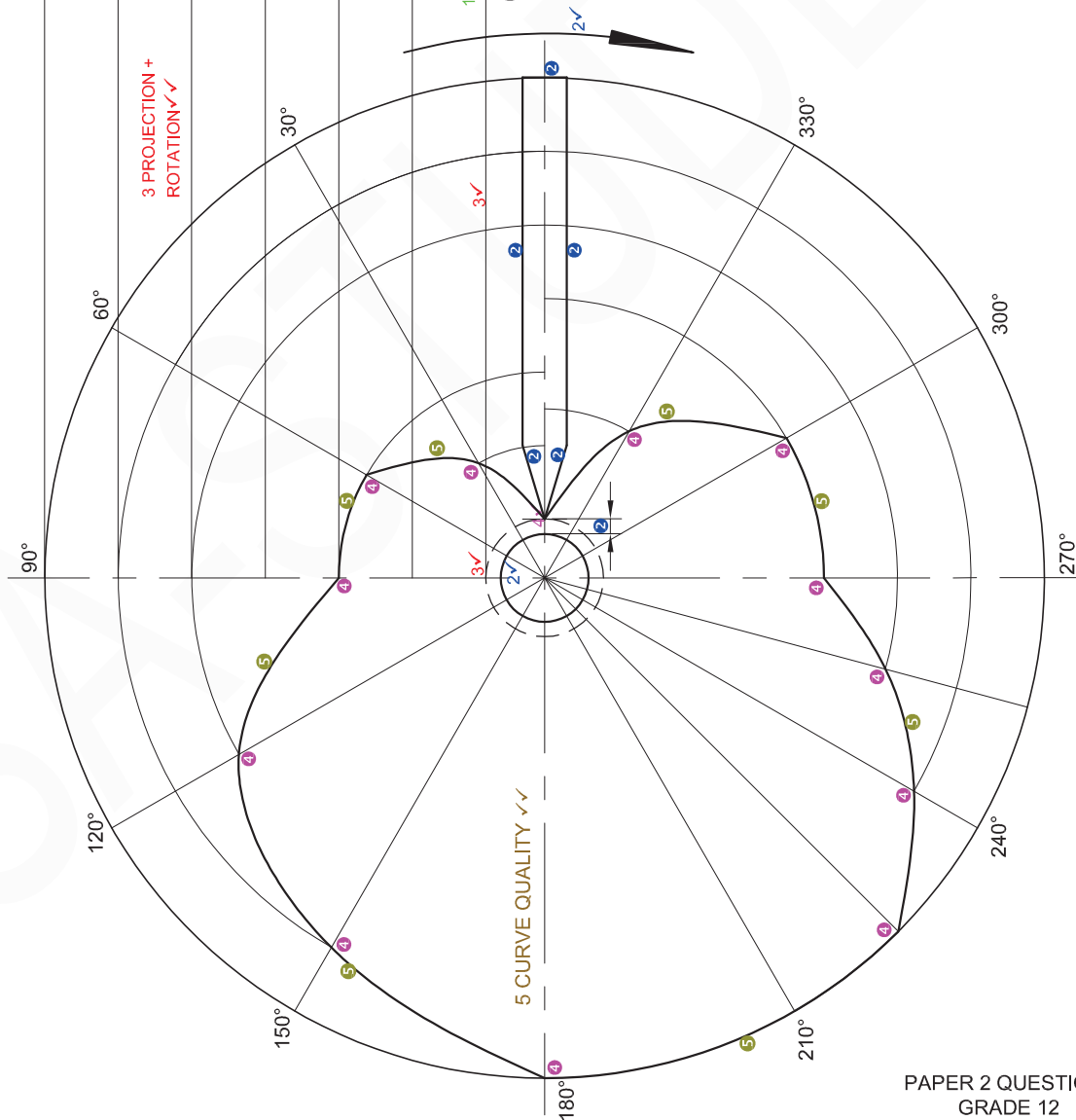
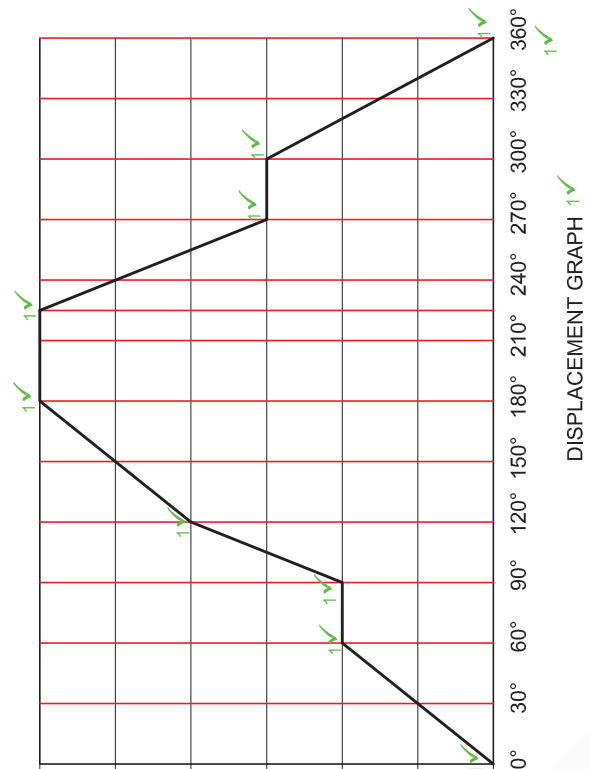


| ASSESSMENT CRITERIA    |             |
|------------------------|-------------|
| GIVEN                  | = 5         |
| CENTRE LINES + CONSTR' | = 5         |
| HELIX                  | = 17        |
| <b>TOTAL</b>           | <b>= 27</b> |



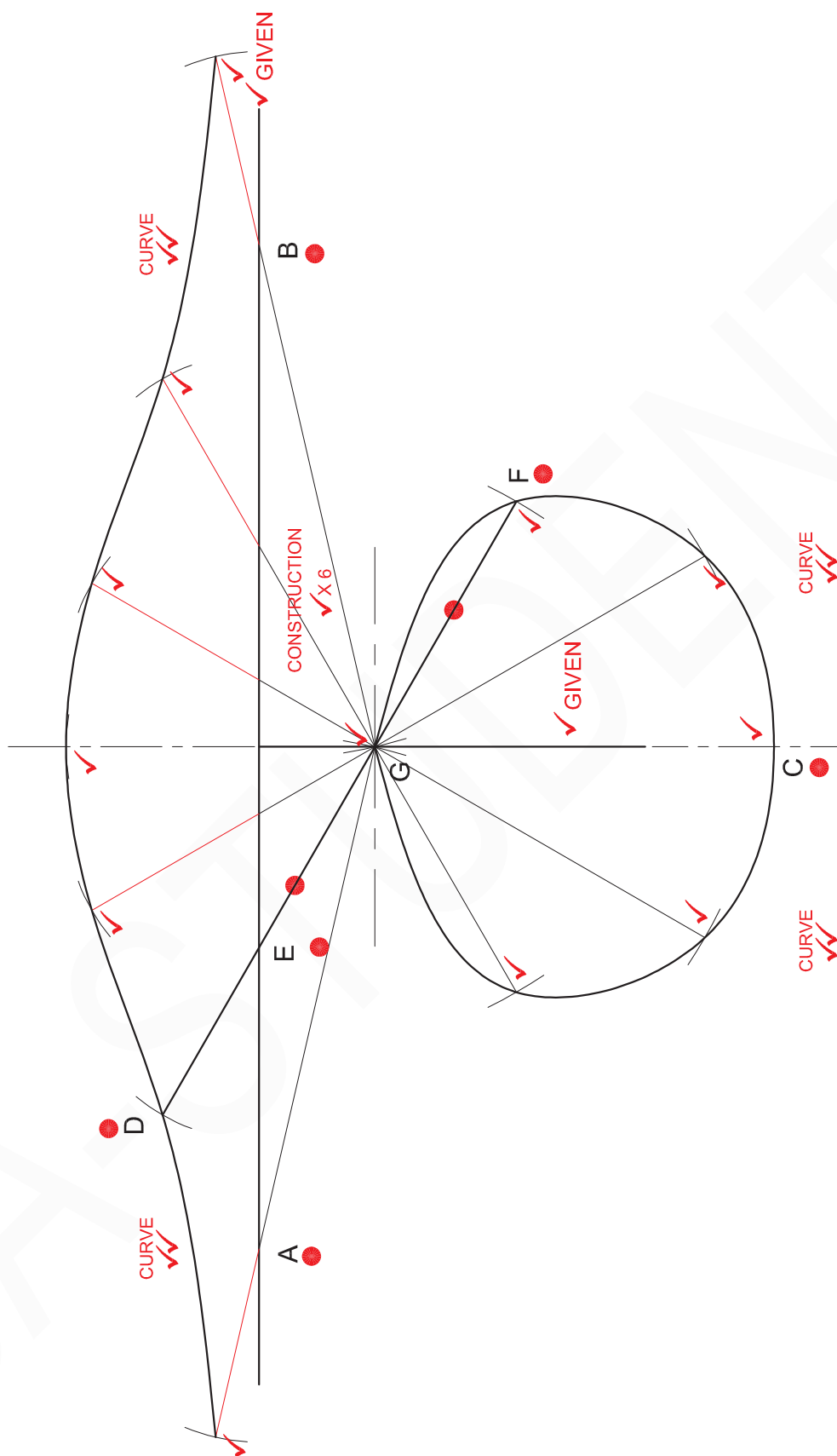
Please turn over

STAPLE



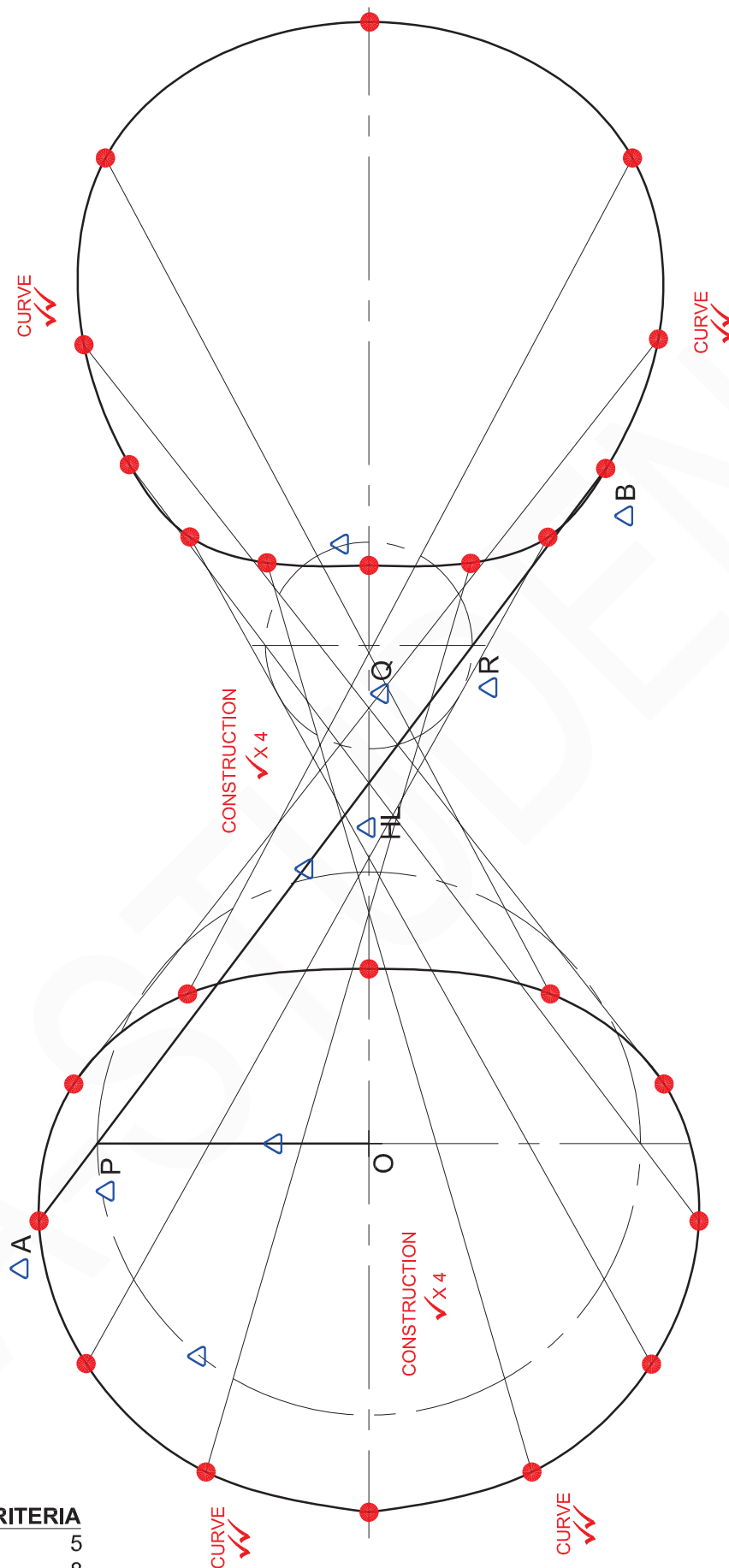
| ASSESSMENT CRITERIA         |           |
|-----------------------------|-----------|
| 1. GRAPH                    | 11        |
| 2. FOLLOWER + SHAFT + ARROW | 5         |
| 3. CONSTRUCTION             | 4         |
| 4. CAM POINTS               | 7         |
| 5. CURVE + QUALITY          | 6         |
| <b>TOTAL</b>                | <b>33</b> |

PAPER 2 QUESTION 2  
GRADE 12  
NOVEMBER 2010  
MEMORANDUM

**ASSESSMENT CRITERIA**

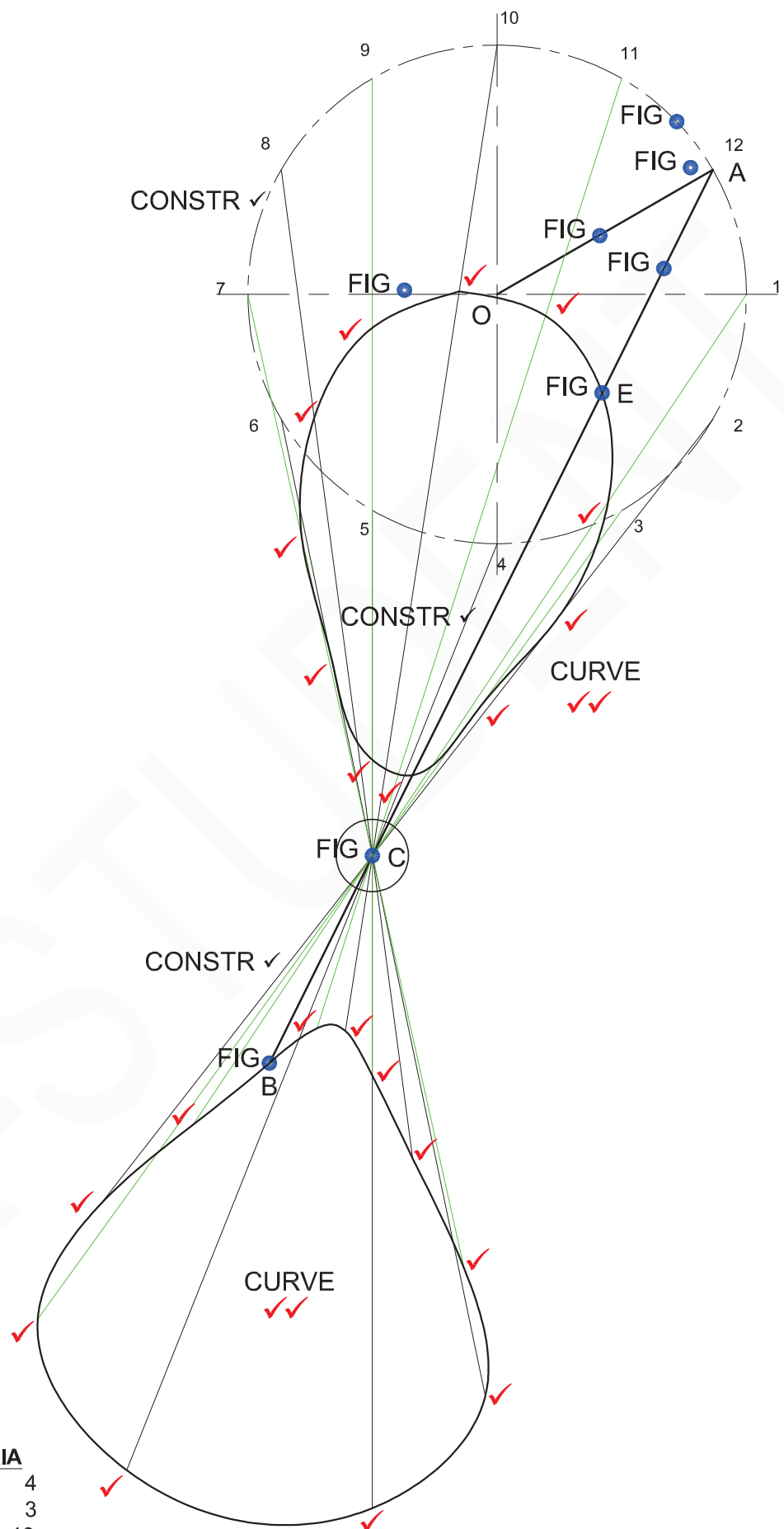
|                 |           |
|-----------------|-----------|
| GIVEN + LABELS  | 6         |
| CONSTRUCTION    | 6         |
| LOCUS D + CURVE | 11        |
| LOCUS F + CURVE | 10        |
| <b>TOTAL</b>    | <b>33</b> |

PAPER 2 QUESTION 1  
 GRADE 12  
 FEBRUARY/MARCH 2010  
 MEMORANDUM

**ASSESSMENT CRITERIA**

|                 |           |
|-----------------|-----------|
| GIVEN + LABELS  | 5         |
| CONSTRUCTION    | 8         |
| LOCUS A + CURVE | 10        |
| LOCUS B + CURVE | 10        |
| <b>TOTAL</b>    | <b>33</b> |

PAPER 2 QUESTION 2  
GRADE 12 NOVEMBER 2009  
MEMORANDUM

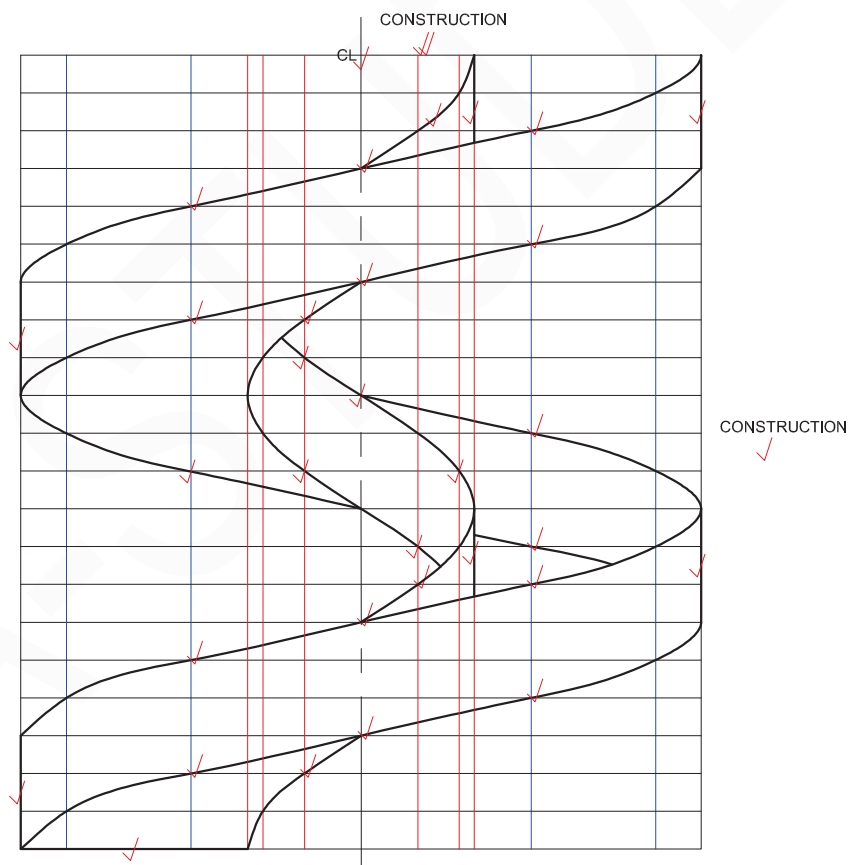
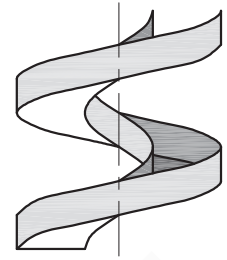
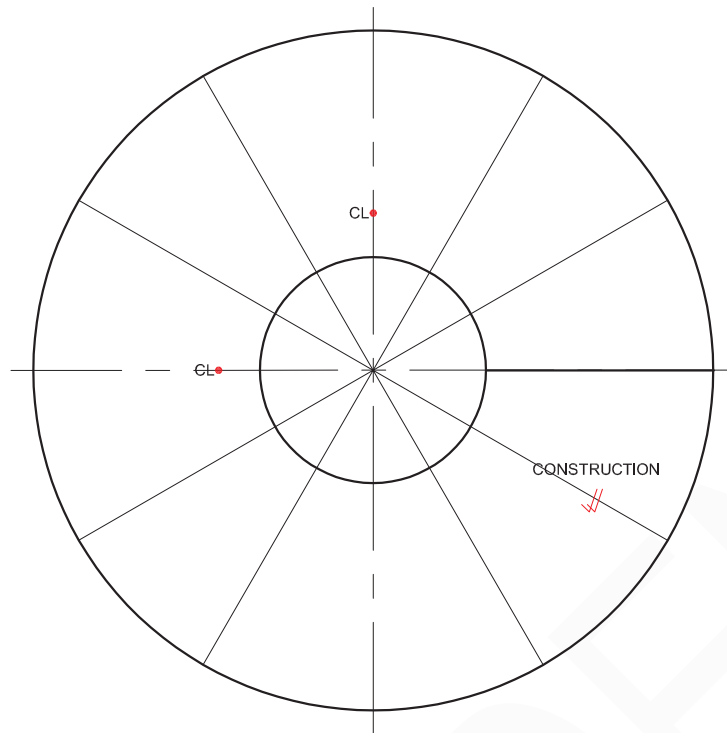
**ASSESSMENT CRITERIA**

|              |           |
|--------------|-----------|
| GIVEN FIGURE | 4         |
| CONSTRUCTION | 3         |
| LOCUS B      | 13        |
| LOCUS E      | 13        |
| <b>TOTAL</b> | <b>33</b> |

PAPER 2 QUESTION 2  
GRADE 12  
FEBRUARY/MARCH 2009  
MEMORANDUM



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**ASSESSMENT CRITERIA**

|              |             |
|--------------|-------------|
| CONSTRUCTION | = 6         |
| TOP VIEW     | = 2         |
| DIRECTION    | = 4         |
| CENTRE LINES | = 2         |
| HELIX        | = 31        |
| <b>TOTAL</b> | <b>= 45</b> |

2008 GRADE 12  
PAPER 2  
EXEMPLAR  
QUESTION 2  
MEMORANDUM