

**SHRI MATA VAISHNO DEVI UNIVERSITY, KATRA**

School of Mechanical Engineering

B. Tech. (ME) Minor-I Examination (Even) 2019-20

Entry No: **18BME029**  
Date: 04/02/2019

Total Number of Pages: [01]

Total Number of Questions: [03]

Course Title: Engineering Graphics

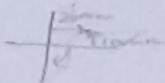
Course Code: MEL 1011

Time Allowed: 1.5 Hours

Max Marks: [20]

Instructions / NOTE (Faculty may include any other relevant instruction, if required)

- i. Attempt All Questions.
- ii. Support your answer with neat freehand sketches/diagrams, wherever appropriate.
- iii. Assume an appropriate data / information, wherever necessary / missing.



| Section - A |   |      |         |
|-------------|---|------|---------|
| Q1.         | Draw the Projections of a Point M, which is 10 mm above H.P and 20 mm in front of V.P.  | [04] | CO1,CO2 |
| Q2.         | A Line PQ 75 mm long is inclined at 30 degree to H.P and 45 degree to V.P. One of its endpoint P is 20 mm and 35 mm from both the planes. Draw its Projections and determine the apparent length and apparent angle of projection.                                | [08] | CO1,CO2 |
| Section - B |   |      |         |
| Q3.         | Front View of a line AB measures 70 mm and makes an angle of 30 degree with XY. The end point A is 10 mm from both the planes. The line is inclined at 45 degree to V.P. Draw its Projections and determine the apparent length and apparent angle of projection. | [08] | CO1,CO2 |

**Course Outcomes**

Upon successful completion of this course, the student shall be able:

- CO1. To learn basics of drawing including dimensioning.
- CO2. To draw orthographic projections of points and lines and traces of line.
- CO3. To draw orthographic projections of planes.
- CO4 . To draw orthographic projections and section of solids.

| CO      | Questions Mapping | Total Marks | Total Number of Students<br>(to appear in Exam) |
|---------|-------------------|-------------|---|
| CO1,CO2 | 1,2,3             | 20          | 54  |

**SHRI MATA VAISHNO DEVI UNIVERSITY, KATRA**  
**School of Mechanical Engineering**  
**B. Tech. (ECE) Minor-I Examination (Second Sem.) 2018-19**

Entry No: 

|   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|
| 1 | 8 | 8 | F | C | O | 6 | 6 |
|---|---|---|---|---|---|---|---|

  
Date: 04-02-2019

Total Number of Pages: [01]

Total Number of Questions: [05]

Course Title: Engineering Graphics with CAD  
Course Code: MEL 1039

Time Allowed: 1.5 Hours

Max Marks: [20]

Instructions / NOTE

- i. Attempt All Questions.
- ii. Assume an appropriate data / information, wherever necessary / missing.

| Q1. | A point 'C' 30 mm away from HP and 40 mm away from VP. Draw it's projections when point lies in second quadrant.   | [02] | CO1,CO2 |
|-----|--|------|---------|
| Q2. | Draw the projection of point 'L' 40 mm below HP and lies in VP.  | [02] | CO1,CO2 |
| Q3. | A line RS 60 mm long, perpendicular to HP and parallel to VP. Draw it's projections when end point R is 10 mm below HP and 30 mm behind VP.  | [04] | CO1,CO2 |
| Q4. | A line IJ 60 mm long, having it's end point I 30 and 40 mm away from HP and VP respectively. Line is inclined to HP at 40° and parallel to VP, draw it's projections when end point I lies in third quadrant.  | [04] | CO1,CO2 |
| Q5. | A line EF having it's end point E 20 mm below HP and 30 mm behind VP while end point F is 40 mm above HP and 50 mm infront of VP. Draw it's projections and also find true length and true inclinations when distance between the end projectors is 60 mm. | [08] | CO1,CO2 |

**Course Outcomes**

Upon successful completion of this course, the student shall be able:

- CO1. To learn basics of drawing including dimensioning.
- CO2. To draw orthographic projections of points and lines and traces of line.
- CO3. To draw orthographic projections of planes.
- CO4 . To draw orthographic projections and section of solids.

| CO          | Questions Mapping | Total Marks | Total Number of Students<br>(to be appeared in Exam) |
|-------------|-------------------|-------------|--|
| CO1,<br>CO2 | 1, 2, 3, 4, 5     | 20          | 80   |

**SHRI MATA VAISHNO DEVI UNIVERSITY, KATRA**  
**School of Mechanical Engineering**  
**B. Tech. (ECE) Minor-II Examination (Second Sem.) 2018-19**

Entry No: \_\_\_\_\_  
 Date: 16-03-2019

Total Number of Pages: [01]

Total Number of Questions: [04]

Course Title: Engineering Graphics with CAD  
 Course Code: MEL 1039

Time Allowed: 1.5 Hours

Max Marks: [20]

Instructions / NOTE

- i. Attempt All Questions.
- ii. Assume an appropriate data / information, wherever necessary / missing.

| Q1. | The top view of a line IJ 60 mm long, measures 40 mm. Its end I is 40 mm in front of VP and 12 mm above HP. End J is 12 mm in front of VP and is below HP. Draw its projections and determine true inclinations. Also locate its traces.  | [06] | CO2 |
|-----|---|------|-----|
| Q2. | The front view of a line PQ makes an angle of $35^0$ with reference line. The HT of line is 50 mm in front of VP and VT is 30 mm below HP. End P is 12 mm above HP and end Q is 100 mm in front of VP. Draw the projections of the line and find it's TL, $\Theta$ and $\Phi$ . | [06] | CO2 |
| Q3. | A regular pentagon having 25 mm side is perpendicular to VP and parallel to HP. Draw it's projections when one of it's side is perpendicular to VP.   | [04] | CO3 |
| Q4. | A regular hexagon having 30 mm side is parallel to VP and perpendicular to HP such that one of it's side is making $50^0$ angle with HP. Draw it's projections.   | [04] | CO3 |

Course Outcomes

Upon successful completion of this course, the student shall be able:

- CO1. To learn basics of drawing including dimensioning.
- CO2. To draw orthographic projections of points and lines and traces of line.
- CO3. To draw orthographic projections of planes.
- CO4. To draw orthographic projections and section of solids.

| CO  | Questions Mapping | Total Marks | Total Number of Students<br>(to be appeared in Exam) |
|-----|-------------------|-------------|--|
| CO2 | 1, 2              | 12          | 80   |
| CO3 | 3,4               | 08          | 80   |

**SHRI MATA VAISHNO DEVI UNIVERSITY, KATRA**

School of Mechanical Engineering

B. Tech. (ECE) Major Examination (II Sem.) 2018-19

Entry No: 

|  |  |  |  |   |   |   |
|--|--|--|--|---|---|---|
|  |  |  |  | 6 | 1 | 4 |
|--|--|--|--|---|---|---|

Total Number of Pages: [02]

Date: 06-05-2019

Total Number of Questions: [10]

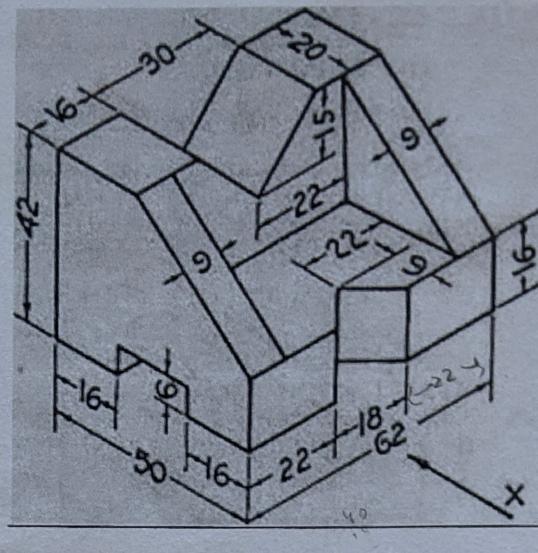
Course Title: Engineering Graphics with CAD

Course Code: MEL 1039

**Time Allowed: 03 Hours****Max Marks: [50]**Instructions / NOTE

- Attempt All Questions.
- Assume an appropriate data / information, wherever necessary / missing.

|      |   |      |     |
|------|---|------|-----|
| Q1.  | A point 'N' 30 mm away from HP and 40 mm away from VP. Draw its projections when point lies in second quadrant.   | [02] | CO2 |
| Q2.  | A line GL 60 mm long, parallel to HP and inclined to VP at $40^\circ$ . Draw its projections when end point G is 20 mm below HP and 30 mm behind VP.  | [03] | CO2 |
| Q3.  | TV of a 75 mm long line CD, measures 50 mm. End C is 15 mm below HP and 50 mm in front of VP. End D is 15 mm in front of VP and it is above HP. Draw projections of CD and finds angles with HP and VP and also draw its traces.  | [06] | CO2 |
| Q4.  | A cone 40 mm diameter and 50 mm axis is resting on one of its element on HP such that its axis parallel to VP. Draw it's projections.   | [06] | CO4 |
| Q5.  | Draw the projections of a regular pentagon of 25mm sides, having one of its side in the H.P. The hexagonal lamina is inclined at $60^\circ$ to the V.P. and perpendicular to H.P.   | [05] | CO3 |
| Q6.  | FV of line AB makes $45^\circ$ angle with XY line and measures 60 mm. Line's TV makes $30^\circ$ with XY line. End A is 15 mm above HP and its VT is 10 mm below HP. Draw projections of line AB, determine its true length, inclinations with HP & VP and locate HT, VT. | [06] | CO2 |
| Q7.  | A hexagonal pyramid, base 25 mm side and axis 50 mm long, has an edge of its base on the ground. Its axis is inclined at $30^\circ$ to the ground and parallels to VP. Draw its projections.  | [06] | CO4 |
| Q8.  | Draw the projections of a hexagonal prism, base 25 mm side and axis 50 mm long, resting on one of its rectangular faces on the H.P. with the axis inclined at $45^\circ$ to the V.P.  | [06] | CO4 |
| Q9.  | Differentiate between 1 <sup>st</sup> and 3 <sup>rd</sup> angle projection.   | [02] | CO4 |
| Q10. | Draw different orthographic views of the given block in below figure. All dimensions are in mm.   | [08] | CO4 |



### Course Outcomes

Upon successful completion of this course, the student shall be able:

- CO1. To learn basics of drawing including dimensioning.
- CO2. To draw orthographic projections of points and lines and traces of line.
- CO3. To draw orthographic projections of planes.
- CO4 . To draw orthographic projections and section of solids.

| CO  | Questions Mapping | Total Marks | Total Number of Students<br>(to be appeared in Exam) |
|-----|-------------------|-------------|--|
| CO2 | 1, 2, 3, 6        | 17          | 80   |
| CO3 | 5                 | 05          |  |
| CO4 | 4,7,8,9,10        | 28          |  |

**SHRI MATA VAISHNO DEVI UNIVERSITY, KATRA**

School of Mechanical Engineering

B. Tech. (ME) Major Examination (II Sem.) 2018-19

Entry No: 18BME029  
Date: 06-05-2019

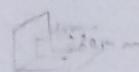
Total Number of Pages: [02]

Total Number of Questions: [9]

Course Title: Engineering Graphics  
Course Code: MEL 1039**Time Allowed: 03 Hours****Max Marks: [50]**Instructions / NOTE

- Attempt All Questions.
- Assume an appropriate data / information, wherever necessary / missing.

|     |  |      |     |  |
|-----|--|------|-----|--|
|     |  |      |     |  |
| Q1. | A point 'S' is 20 mm above HP and 40 mm in front of VP. Draw its projections when point lies in First quadrant.  | [02] | CO2 |  |
| Q2. | A line PQ 75 mm long, parallel to HP and inclined to VP at $40^\circ$ . Draw its projections when end point P is 20 mm above XY and 30 mm in front of VP.  | [06] | CO2 |  |
| Q3. | The TV of a 75 mm long line CD, measures 50 mm. End C is 15 mm below HP and 50 mm in front of VP. End D is 15 mm in front of VP and it is above HP. Draw projections of line and determine its angles with HP and VP and also draw its traces.   | [06] | CO2 |  |
| Q4. | Draw the projections of a regular Hexagonal Plate of 30mm sides, having one of its side in H.P. The plate is inclined at $60^\circ$ to V.P.  | [06] | CO3 |  |
| Q5. | A right circular cone of 40 mm diameter and 50 mm axis is resting on one of its element on HP such that its axis parallel to VP. Draw its projections.   | [06] | CO4 |  |
| Q6. | F.V of line RS makes $45^\circ$ angle with XY line and measures 60 mm. Its T.V makes $30^\circ$ with XY line. End R is 15 mm above HP and its VT is 10 mm below HP. Draw projections of line RS, determine its true length, inclinations with HP & VP and also locate its H.T and V.T. | [06] | CO2 |  |
| Q7. | A hexagonal pyramid, base 25 mm side and axis 50 mm long, has an edge of its base on the ground. Its axis is inclined at $30^\circ$ to the ground and parallel to VP. Draw its projections.  | [08] | CO4 |  |
| Q8. | Draw the projections of a hexagonal prism, base 25 mm side and axis 50 mm long, resting on one of its rectangular faces on the H.P. with the axis inclined at $45^\circ$ to the V.P.   | [08] | CO4 |  |
| Q9. | Differentiate between 1 <sup>st</sup> and 3 <sup>rd</sup> angle projection method.   | [02] | CO4 |  |



### Course Outcomes

Upon successful completion of this course, the student shall be able:

- CO1. To learn basics of drawing including dimensioning.
- CO2. To draw orthographic projections of points and lines and traces of line.
- CO3. To draw orthographic projections of planes.
- CO4 . To draw orthographic projections and section of solids.

| CO  | Questions Mapping | Total Marks | Total Number of Students<br>(to be appeared in Exam) |
|-----|-------------------|-------------|--|
| CO2 | 1, 2, 3, 6        | 20          | 60   |
| CO3 | 4                 | 06          |  |
| CO4 | 5,7,8,9           | 24          |  |

**SHRI MATA VAISHNO DEVI UNIVERSITY, KATRA**  
**School of Mechanical Engineering**  
**B. Tech. (CSE, CE, EE) Mid Term Minor Examination (First Sem.) 2019-20**

Entry No: **198CS051**

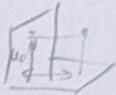
Date: 30-09-2019

Total Number of Pages: [01]  
Total Number of Questions: [06]

Course Title: Engineering Graphics with CAD  
Course Code: MEL 1039

**Max Marks: [30]**

**Time Allowed: 1.5 Hours**



Instructions / NOTE

- Attempt All Questions.
- Assume an appropriate data / information, wherever necessary / missing.

|     |  |      |         |
|-----|--|------|---------|
| Q1. | A point 'S' 30 mm away from VP and 40 mm away from HP. Draw it's projections when point lies in First quadrant.  | [02] | CO1,CO2 |
| Q2. | Draw the projections of a point 'T' which lies in both HP and VP.  | [02] | CO1,CO2 |
| Q3. | A line 'MN' 60 mm long, is inclined at $30^\circ$ to VP and parallel to H.P. One of its end point is 10 mm from both the planes and is in First quadrant. Draw its projections and determine the projected length.   | [04] | CO1,CO2 |
| Q4. | A line 'RS' 60 mm long, having it's end point R 30 mm and 40 mm away from HP and VP respectively. Line is inclined to HP at $40^\circ$ and parallel to VP. Draw it's projections when end point R lies in First quadrant.  | [04] | CO1,CO2 |
| Q5. | A line 'AB', 65 mm long has it's end A both in HP and VP. It is inclined at $45^\circ$ to HP and $30^\circ$ to VP. Draw it's projections and also find apparent length in front and top view.  | [8]  | CO1,CO2 |
| Q6. | A line 'GH' having it's end point G 10 mm above HP and 30 mm in front of VP while end point H is 40 mm above HP and 50 mm in front of VP. Draw it's projections and also find true length and true inclinations when distance between the end projectors is 60 mm. | [10] | CO1,CO2 |

**Course Outcomes**

Upon successful completion of this course, the student shall be able:

- CO1. To learn basics of drawing including dimensioning.
- CO2. To draw orthographic projections of points and lines and traces of line.
- CO3. To draw orthographic projections of planes.
- CO4. To draw orthographic projections and section of solids.

| CO          | Questions Mapping | Total Marks | Total Number of Students<br>(to be appeared in Exam) |
|-------------|-------------------|-------------|--|
| CO1,<br>CO2 | 1, 2, 3, 4, 5,6   | 30          | 190  |

**SHRI MATA VAISHNO DEVI UNIVERSITY, KATRA**

School of Mechanical Engineering

B. Tech. (CSE/CE/EE) Major Examination (I Sem.) 2019-20

**Entry No:** 1 A B C E 0 3 1

**Date:** 16-12-2019

**Total Number of Pages:** [02]

**Total Number of Questions:** [09]

**Course Title:** Engineering Graphics with CAD

**Course Code:** MEL 1039

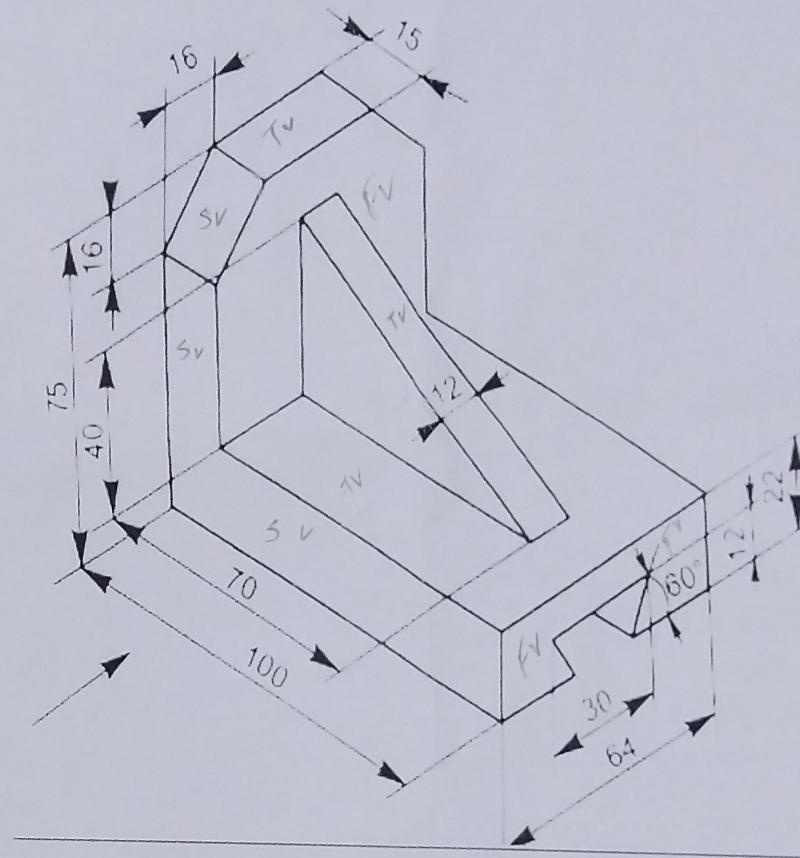
**Time Allowed: 03 Hours**

**Max Marks: [50]**

Instructions / NOTE

- Attempt All Questions.
- Assume an appropriate data / information, wherever necessary / missing.

|     |   |      |     |
|-----|---|------|-----|
| Q1. | A point 'D' is 30 mm above HP and 40 mm in front of VP. Draw its projections.   | [02] | CO2 |
| Q2. | A line CD 70 mm long, parallel to HP and perpendicular to VP. Draw its projections when end point C is 20 mm in front of VP and 30 mm above HP.   | [03] | CO2 |
| Q3. | A line EF, 75 mm long, has its end E in VP and 45 mm below HP and end F in the HP. The line is inclined at $45^\circ$ to the VP. Draw it's projections and also find true inclination with HP.                                    | [06] | CO2 |
| Q4. | A right regular square pyramid, side of base 30 mm and axis 54 mm long, rests on HP on one of its base corners, such that the slant edge containing that corner is perpendicular to the H.P. Draw the projections of the pyramid. | [04] | CO4 |
| Q5. | Draw the projections of a circle of 50 mm diameter having its plane perpendicular to HP and inclined at $30^\circ$ to the V.P. Its centre is 30 mm above the H.P. and 20 mm in front of the V.P.                                  | [05] | CO3 |
| Q6. | The top view of a line MN 70 mm long, measures 50 mm. Its end M is 40 mm in front of VP and 15 mm above HP. End N is 15 mm in front of VP and is below HP. Draw its projections and determine its true inclinations.              | [08] | CO2 |
| Q7. | A right circular cone, diameter of base 50 mm and height 62 mm, lies on HP on one of its elements with its axis parallel to VP. Draw the projections of the cone.   | [06] | CO4 |
| Q8. | A right regular pentagonal prism, edge of base 25 mm and height 55 mm, rests on an edge of its base in HP such that its axis is parallel to VP and inclined to the HP at $45^\circ$ . Draw the projections of the solid.          | [06] | CO4 |
| Q9. | Draw different orthographic views of the given block in given figure. All dimensions are in mm.   | [10] | CO4 |



### Course Outcomes

Upon successful completion of this course, the student shall be able to:

- CO1. To learn basics of drawing including dimensioning.
- CO2. To draw orthographic projections of points and lines and traces of line.
- CO3. To draw orthographic projections of planes.
- CO4 . To draw orthographic projections and section of solids.

| CO  | Questions Mapping | Total Marks | Total Number of Students<br>(to be appeared in Exam) |
|-----|-------------------|-------------|--|
| CO2 | 1, 2, 3, 6        | 19          | 190  |
| CO3 | 5                 | 05          |  |
| CO4 | 4,7,8,9           | 26          |  |