

School of Engineering

I Semester 2015-2016 COMPREHENSIVE EXAMINATION

Course: ME A 101 Engineering Graphics

(On AutoCAD)

Weightage: 40% 9th Jan' 2016

SET A1

Max Marks:80

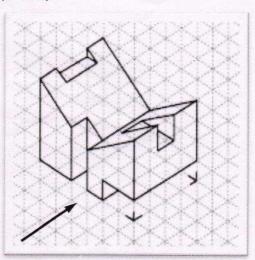
Max Time: 120 Minutes

Instructions to Candidates

1. Follow all instructions displayed in the lab carefully

Print ID number in the drawing sheet using text command.

1. Draw the front, top and right side views of the object shown below by using FIRST angle projection. (5+5+5)



- 2. Draw the projections of the regular hexagonal plate of 80 mm side, having one of its corner in the VP, the side is at inclined 60 degrees to the HP and its surface makes an angle of 40 degrees with the VP. (15)
- 3. A line AB, 90mm long, is inclined at 45 degrees to HP and 30 degrees to VP. The point A is located 40mm above HP and 35mm in front of VP. Draw the projections of the line. Find the apparent lengths and apparent inclination. Also, show the traces. (12+3+5)
- 4. a) A square pyramid (base edge = 150 mm and height = 250 mm) is resting on its base on HP with two of its base edges equally inclined to VP. Draw the projections. (6)
- b) The solid in part (a) is tilted in such a way that it is resting on one of its base corner with the axis inclined 45 degree to HP, show its projections. (6)
- c) The solid in part (a) is cut by an AIP inclined 30 degree to HP and passing through mid-point of the axis. Draw its sectional view, true shape and development. (5+3+10)



(2)

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School of Engineering

I Semester 2015-2016

COMPREHENSIVE EXAMINATION Course: ME A 101 Engineering Graphics

(On AutoCAD)

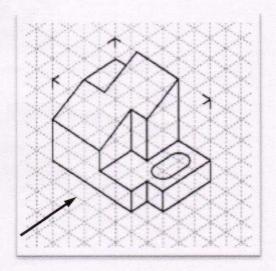
Max Marks:80

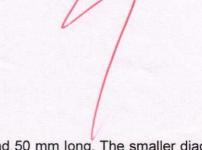
Max Time: 120 Minutes

Weightage: 40% 9th Jan' 2016

SET A2

- 1. Follow all instructions displayed in the lab carefully
- 2. Print ID number in the drawing sheet using text command.
- 1. Draw the front, top and right side views of the object shown below by using FIRST angle projection. (5+5+5)





- 2. Draw the projections of a rhombus having diagonals 100 mm and 50 mm long. The smaller diagonal is parallel to HP and VP, while the other is inclined at 45° to the HP. (15)
- 3. The plan and elevation of a line CD measures 150 mm and 100 mm respectively. The line is inclined 30 degrees to HP. End A is 55 mm above HP and 25 mm in front of VP. Point D is in same quadrant as C. Draw the projections. Locate the traces. Find the apparent inclination. (12+5+3)
- 4. a) A right circular cone (base diameter = 150 mm and height = 200 mm) is resting on ground on its circumferential base. If the apex of the cone is 100 mm in front of VP, draw the projection. (6)
- b) The solid in part (a) is tilted in such a way that it is resting on the ground on one of its generators (imaginary edge on slant surface), draw its projections.(6)
- c) The solid in part (a) is cut by a cutting plane at 90 degree to the ground and passing through apex and centre of the circular base. Draw its sectional view, true shape and development. (5+3+10)

School of Engineering

I Semester 2015-2016

COMPREHENSIVE EXAMINATION

Course: ME A 101 Engineering Graphics

(On AutoCAD)

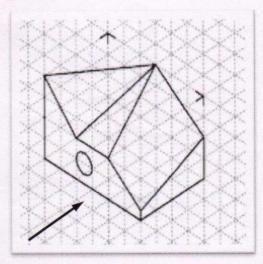
Max Marks:80

Max Time: 120 Minutes

Weightage: 40% 9th Jan' 2016

SET B1

- 1. Follow all instructions displayed in the lab carefully
- 2. Print ID number in the drawing sheet using text command.
- 1. Draw the front, top and right side views of the object shown below by using THIRD angle projection. (5+5+5)



- 2. A pentagonal plate of negligible thickness and having edge length 100 mm is resting on one of its corners on HP, the line joining corner and center of the pentagonal plate is inclined at 45 degrees to VP. The surface makes an angle of 30 degrees with HP. Draw projections of the plate. (15)
- 3. Line EF,200 mm long, is inclined at 30 degrees to VP. The point E is located 25mm behind VP and 50mm below HP. Point F is in same quadrant as E. The end projector distance is 100mm. Draw the projections of the line. Find the apparent lengths and apparent inclination. Also, show the traces. (12+3+5)
- 4. a) A hexagonal pyramid (base edge = 50 mm and height = 250 mm) is resting on the ground on one of its base edges. Assume the object to be in 3<sup>rd</sup> quadrant. Draw the projections. **(6)**
- b) If it is tilted in such a way that slant face corresponding to base edge is resting on the ground, draw its projections. (6)
- c) The solid in part (a) is cut by a cutting plane at 30 degree to the ground and passing through midpoint of the axis. Draw its sectional view, true shape and development. (5+3+10)

School of Engineering

I Semester 2015-2016

COMPREHENSIVE EXAMINATION Course: ME A 101 Engineering Graphics

(On AutoCAD)

Max Marks:80

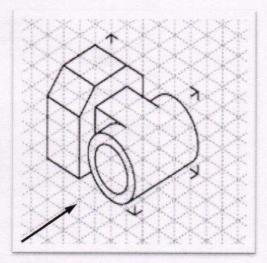
Max Time: 120 Minutes

Weightage: 40%

9th Jan' 2016

SET B2

- 1. Follow all instructions displayed in the lab carefully
- Print ID number in the drawing sheet using text command.
- 1. Draw the front, top and right side views of the object shown below by using THIRD angle projection. (5+5+5)



- 2. A circular plate AB of 100 mm diameter is perpendicular to HP and diameter CD parallel and 100 mm above the HP. The surface is inclined 40 degrees to the VP. Draw the projections of the plate. (15)
- 3. Line RS, 200mm long is inclined 40 degrees to HP and 50 degrees to VP. End R is 25 mm behind VP and is in HP. Assume S to be in 3rd quadrant. Draw the projections of the line. Find the apparent lengths and apparent inclination. Also, show the traces. (12+3+5)
- 4. a) A square prism (base edge = 50 mm and height = 200 mm) is resting on its base on VP with two of its base edges are parallel to the HP. Draw the projection. (6)
- b) If it is tilted in such a way that it is resting on one of its base edges with the axis inclined 35 degree to VP, show its projection. (6)
- c) The solid in part (a) is cut by cutting plane which is passing through resting bottom left base edge and top right edge. Draw its sectional view, true shape and development. (5+6+7)

School of Engineering

I Semester 2015-2016

COMPREHENSIVE EXAMINATION

Course: ME A 101 Engineering Graphics

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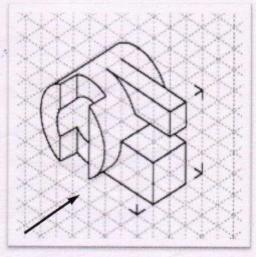
Max Marks:80

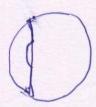
Max Time: 120 Minutes

Weightage: 40% 9th Jan' 2016

SET C1

- 1. Follow all instructions displayed in the lab carefully
- 2. Print ID number in the drawing sheet using text command.
- 1. Draw the front, top and right side views of the object shown below by using FIRST angle projection. (5+5+5)





- 2. Find out the surface inclination that a square plate of 140 mm diagonal makes with HP if it is resting on one of its corner on the HP, and the top view appears as rhombus with smaller diagonal equal to half of the longer diagonal. (15)
- 3. The elevation of a line PQ measures 100mm long and makes 30 degrees to XY line. The point P is in the HP and 55mm in front of VP. End Q is in first quadrant. The line is inclined 40 degrees to VP. Draw the projections of the line. Find the apparent lengths and apparent inclination. Also, show the traces. (12+3+5)
- 4. a) A cylinder (base diameter = 200 mm and height = 300 mm) is resting on VP on its circumferential base. Draw the projections. (6)
- b) If the cylinder is tilted in such a way that its base makes an angle of 40 degree to the VP, draw its projection. (6)
- c) The solid in part (a) is cut by an AVP inclined at an angle of 35 degree to the VP and intersecting the axis 100 mm in front of VP. Draw its sectional view, true shape and development. (5+6+7)

School of Engineering

I Semester 2015-2016 COMPREHENSIVE EXAMINATION

Course: ME A 101 Engineering Graphics

(On AutoCAD)

Max Marks:80

Max Time: 120 Minutes

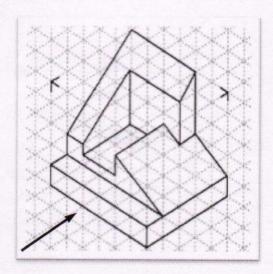
Weightage: 40%

9th Jan' 2016

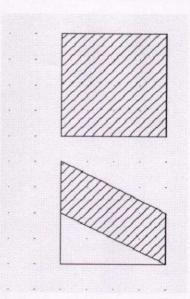
SET C2

#### Instructions to Candidates

- 1. Follow all instructions displayed in the lab carefully
- 2. Print ID number in the drawing sheet using text command.
- 1. Draw the front, top and right side views of the object shown below by using FIRST angle projection. (5+5+5)



2. Find the true shape of the auxiliary surface shown below. (15)



- 3. A line MP is inclined at 30 degrees to HP. End M is 15 mm above HP while the end P is in VP. The midpoint O of the line is 40mm above HP. Distance between end projectors is 70mm. Draw the projections of the line and show the midpoint. (15+5)
- 4.
- a) A hexagonal prism (base edge = 60 mm and height = 250 mm) is resting on the VP on its base with two base edges are parallel to HP. Draw the projections. (6)
- b) The solid in part (a) is tilted in such a way that one of its vertical edges is resting on VP, draw its projection. (6)
- c) The solid in part (a) is cut by a cutting plane passing through the bottom base left corner and opposite top base right corner. Draw its sectional view, true shape and development. (5+6+7)

School of Engineering

I Semester 2015-2016

COMPREHENSIVE EXAMINATION

Course: ME A 101 Engineering Graphics

(On AutoCAD)

Max Marks:80

Max Time: 120 Minutes

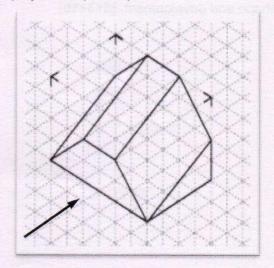
Weightage: 40%

9th Jan' 2016

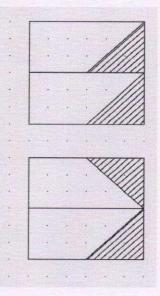
SET D1

#### Instructions to Candidates

- 1. Follow all instructions displayed in the lab carefully
- 2. Print ID number in the drawing sheet using text command.
- 1. Draw the front, top and right side views of the object shown below by using FIRST angle projection. (5+5+5)



2. Find the true shape of the auxiliary surface shown below (15)



3. A line PN, 90 mm long is inclined at 30 degrees to HP. Its end P is 15mm above HP and 20mm in front of VP. Its front view measures 65mm. Draw the projections of the line and find the true and apparent inclinations. (14+3+3)

4.

- a) A square pyramid (base edge = 50 mm and height = 100 mm) is resting on its base on HP, with its faces equally inclined to VP. Draw the projections. (6)
- b) The solid in part (a) is tilted in such an axis makes an angle of 55 degree to the HP, draw its projection. (6)
- c) The solid in part (a) is cut by a cutting plane passing through the mid-point of the axis and 30 degree inclined to the HP. Draw its sectional view, true shape and development. (5+3+10)

School of Engineering

I Semester 2015-2016

COMPREHENSIVE EXAMINATION Course: ME A 101 Engineering Graphics

(On AutoCAD)

Max Marks:80

Max Time: 120 Minutes

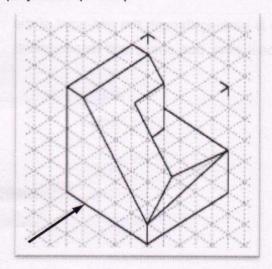
Weightage: 40%

9th Jan' 2016

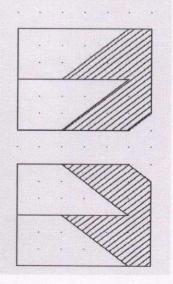
SET D2

#### Instructions to Candidates

- 1. Follow all instructions displayed in the lab carefully
- 2. Print ID number in the drawing sheet using text command.
- 1. Draw the front, top and right side views of the object shown below by using FIRST angle projection. (5+5+5)



2. Find the true shape of the auxiliary surface shown below (15)



- 3. A line SM, 75mm long is inclined 45 degrees to HP. The TV makes an angle of 60 degrees with VP. End S is in HP and at a distance of 15mm in front of VP. Draw the projections of the line and find the true and apparent inclinations. (14+3+3)
- 4.
- a) A pentagonal pyramid (base edge = 50 mm and height = 200 mm) is resting on its base on HP. The axis is perpendicular to HP and parallel to VP. The pyramid is in 3rd quadrant. Draw the projections. (6)
- b) The solid in part (a) is resting on one of its base corner with axis inclined 40 degrees to HP, draw the projections. (6)
- c) The solid in part (a) is cut by a section plane which is passing through the mid-point of the axis and inclined 45 degree to the HP. Draw its sectional view, true shape and development. (5+3+10)

School of Engineering

**I** Semester 2015-2016

COMPREHENSIVE EXAMINATION Course: ME A 101 Engineering Graphics

(On AutoCAD)

Max Marks:80

Max Time: 120 Minutes

Weightage: 40%

9th Jan' 2016

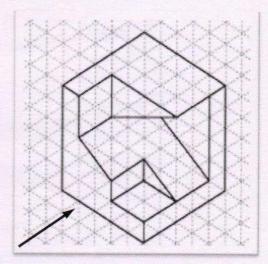
SET E1

Instructions to Candidates

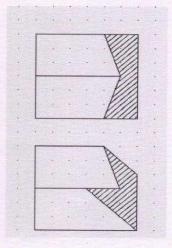
1. Follow all instructions displayed in the lab carefully

2. Print ID number in the drawing sheet using text command.

1. Draw the front, top and right side views of the object shown below by using FIRST angle projection. (5+5+5)



2. Find the true shape of the auxiliary surface shown below. (15)



3. A line SP is 75mm long. It's top view measures 65 mm while front view measures 50 mm. Point S is in HP and 25 mm in front of VP. Point P lies in same quadrant as S. Draw the projections of the line and find the true and apparent inclinations. (14+3+3)

4.

- a) A pentagonal prism (base edge = 50 mm and height = 200 mm) having base 30 mm above the ground with two adjacent base edges are equally inclined to VP. Draw the projection. (6)
- b) If axis of the prism of solid in part (a) is inclined at 40 degree to HP without changing distance of centre point from HP, draw its projection. (6)
- c) The solid in part (a) is cut by AIP passing through a point on axis, 100 mm above the base. Draw its sectional view, true shape and development. (5+6+7)

School of Engineering

**I** Semester 2015-2016

COMPREHENSIVE EXAMINATION Course: ME A 101 Engineering Graphics

(On AutoCAD)

Max Marks:80

Max Time: 120 Minutes

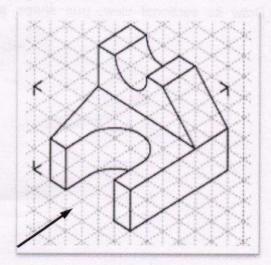
Weightage: 40%

9th Jan' 2016

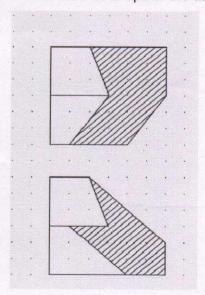
SET E2

#### Instructions to Candidates

- 1. Follow all instructions displayed in the lab carefully
- 2. Print ID number in the drawing sheet using text command.
- 1. Draw the front, top and right side views of the object shown below by using FIRST angle projection. (5+5+5)



2. Find the true shape of the auxiliary surface shown below. (15)



3. A line CK, 65mm long, has its end C 20mm above HP and 25mm in front of VP. The point K is 40mm above HP and 65mm in front of VP. Draw the projections of the line. Find the apparent lengths and apparent inclination. Also, show the traces. (12+3+5)

4.

- a) A triangular pyramid (base edge = 40 mm and height = 150 mm) with base parallel to and 30 mm above the ground. Draw projection of solid if one of its base edges in inclined 45 degree to VP and exposed to the observer. (6)
- b) If axis of the pyramid in part (a) is inclined at 40 degree to HP without changing distance of centre point from HP, draw its projection. (6)
- c) The solid in part (a) is cut by AIP in such a way that plane is passing through the apex and makes an angle of 20 degree with the axis of pyramid. Draw its sectional view, true shape and development. (5+3+10)

ID No.:
Section No.: Signature of Invigilator:
Presidency University, Bengaluru
School of Engineering
I Semester 2015-2016 Quiz Course: ME A 101 Engineering Graphics (Closed Book)
Max Marks: 20 Max Time: 30 Min Weightage: 10% 18th Dec' 2015 Set A
Instructions to Candidates  1. Write legibly using pen only.  2. Do not overwrite.  3. Answer in the question paper itself, there will be no separate answer book provided.  4. Enter your ID No. and Section No. in the designated place
$20 \times 1 = 20 \text{ Marks}$
1. Projection of points, lines, planes and solids fall under:
(a) Working drawing (b) Descriptive geometry (c) both (d) none of the above
2. For Isometric projection, the relation between $\alpha$ , $\beta$ and $\gamma$ is:
3. The apparent length is always the true length
(a) Equal to (b) Less than or equal to (c) Greater than or equal to (d) none of the above
4. State True or False: In projection of lines, the projections of the end points of a line always falls in the same vertical line.
5. A plane inclined to HP and perpendicular to PP can be called as:
(a) AOP (b) AIP (c) AVP (d) none of the above
6. Pick the odd one out:
(a) square prism (b) square pyramid (c) cube (d) cone
7. In third angle method of projection the front view lies above XY line and top view lies below XY line. True or False?
8. The TITLE BLOCK is located at the bottom left corner of a Drawing Sheet. True or False?
9. In orthographic projections, the projectors are to plane of projection.
10. Two types of dimensions are needed to represent all the dimensions on a drawing. They are size dimension and dimension.
11. For a point Q, its projections coincides with each other 40 mm below xy. The point lies in

1. $\alpha = \beta \neq \gamma \text{ or } \alpha \neq \beta = \gamma \text{ or } \alpha = \gamma \neq \beta$ 2. $\alpha \neq \gamma = \beta \text{ or } \alpha \neq \beta = \gamma \text{ or } \alpha \neq \gamma \neq \beta$ 3. $\alpha = \gamma = \beta \text{ or } \alpha = \beta \neq \gamma \text{ or } \alpha \neq \gamma \neq \beta$ 4. $\alpha = \gamma \neq \beta \text{ or } \alpha \neq \beta = \gamma \text{ or } \alpha \neq \gamma = \beta$	
13. Projection of line AB in FV and in TV are lines perpendicular to xy line, the location of travill be	aces
(a) Below XY line (b) Above XY line (c) On XY line (d) None of the above	
14. To set the rectangular graphic screen, the following command should be used.	
(a) GRID (b) SNAP (c) LIMITS (d) AXIS	
15. Plan is called as front view and elevation is called as top view. True or false?	
16. Tetrahedron is an irregular polyhedron. True or false?	
17. The projection of a line is parallel to XY line in both front and top views. Then the line is parato both HP and VP. True or false?	ıllel
The surface shown in figure is a surface.	
19. A hidden line is used to represent	
The surface shown in figure has a horizontal trace. True or false?	
For official use (students shall not write beyond this line)	
Marks scored out of 20	

(c) III quadrant

(d) IV quadrant

Name and Signature of Examiner with Date

(a) I quadrant

(b) II quadrant

12. In Dimetric projection, which of the following is true

ID No.:
Section No.: Signature of Invigilator:
Presidency University, Bengaluru
School of Engineering
I Semester 2015-2016 Quiz Course: ME A 101 Engineering Graphics (Closed Book)
Max Marks: 20 Max Time: 30 Min Weightage: 10% 18th Dec' 2015 Set B
Instructions to Candidates  1. Write legibly using pen only.  2. Do not overwrite.  3. Answer in the question paper itself, there will be no separate answer book provided.  4. Enter your ID No. and Section No. in the designated place
$20 \times 1 = 20 \text{ Marks}$
1. The type of projection system used in Orthographic projection:
(a) Oblique projection system (b) Parallel projection system (c) Combination of both (d) none of the above
2. The elements of projection are the object, and
3. In projection of solids, to make inclination with VP, which view is rotated?
(a) FV (b) TV (c) RSV (d) LSV
4. For increasing the thickness of line in AutoCAD, command is used.
The plane shown in figure does NOT have:  (a) HT (b) HT and VT (c) VT (d) none of the above
6. Right Circular Cone is generated by the revolution of:
(a) Rectangle (b) Semi-circle (c) Right angled triangle (d) Parabola
7. If a line is in 2nd quadrant then
(a) front view and top view lie below XY line. (b) front view lies above and top view lies below XY line.
(c) front view and top view lie above XY line. (d) front view lies below and top view lies above XY line.
8. To change the size of a point in AUTOCAD, the command used is <u>PDMODE</u> . True or False?

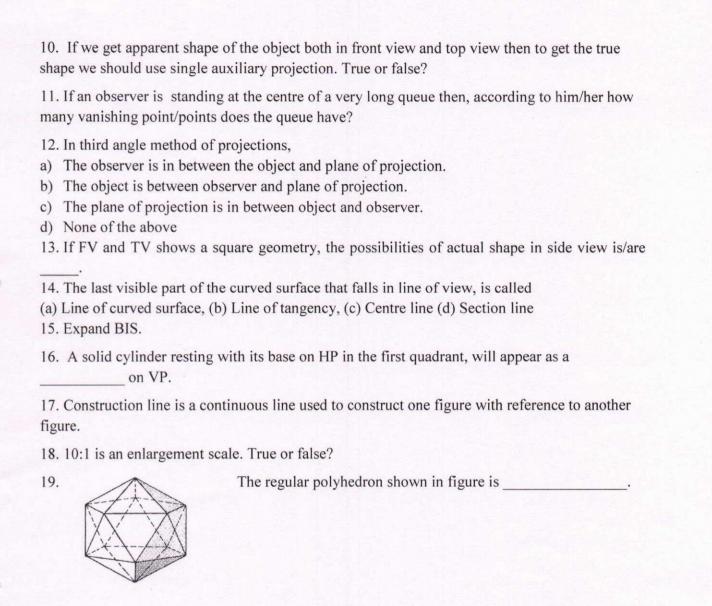
9. Isometric projection is a sub-type of Axonometric projection. True or False?

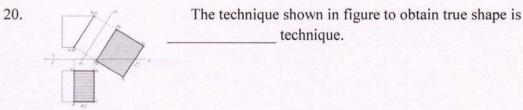
10. In orthographic projections the False?	front view, top view and side view for a sphere is the same. True or
11h	has twelve equal and regular pentagons as faces.
12. Thin continuous line connecting	a note or dimension figure with the feature to which it applies is
(a) Extension Line (b) Outline	(c) Leader Line (d) Hidden Line
13. The major advantage(s) of CAD	
(a) Unlimited storage capacity	(b) Visual modeling of objects
(c) Improved engineering productivit	ty (d) All of the above
14. In axonometric projections all par	rallel lines in an abi
15. The object in third quadrant will I	be
(a) Above HP and behind VP	(b) Below HP and behind VP
(a) D-1- IID 11 a	(d) Above HP and in front of VP
16. A surface inclined to two references	erence planes and perpendicular to third reference plane is called
17. If hidden and center lines over lap	o, then preference is given to center line.
18. Drawing entities like line, arc and	polygon are in modify tool bar.
19.	The method of multi-view projection depicted in the figure is
FRONT	SIDE
20. One view drawings are used for obtrue or false?	bjects having regular features and symmetry about two or three axes.
For official use (students shall not write	e beyond this line)
Marks scored out of 20	

(60

ID No.:
Section No.: Signature of Invigilator:
Presidency University, Bengaluru
School of Engineering
I Semester 2015-2016 Quiz Course: ME A 101 Engineering Graphics (Closed Book)
Max Marks: 20 Max Time: 30 Min Weightage: 10% 18th Dec' 2015 Set C
Instructions to Candidates  1. Write legibly using pen only.  2. Do not overwrite.  3. Answer in the question paper itself, there will be no separate answer book provided.  4. Enter your ID No. and Section No. in the designated place
$20 \times 1 = 20 \text{ Marks}$
1. The natural method for multiview projection is limited by the of the object.
2. IF an inclined surface is seen as a line in front view, making that line horizontal will result in obtaining the TS of the inclined surface in: (a) FV (b) RSV (c) TV (d) LSV
3. Pyramids are classified as:
(a) Regular polyhedra (b) Irregular polyhedra (c) Solid of revolution (d) none of the above
4. If a line is in 2nd quadrant then
a) front view and top view lie below XY line.
b)front view lies above and top view lies below XY line.
c)front view and top view lie above XY line.
d) front view lies below and top view lies above XY line.
5. A3 sheet is bigger than the A4 sheet. True or false?
6. To change the size of a point in AUTOCAD, the command used is <u>PDMODE</u> . True or False?
7. A plane which is inclined to VP and perpendicular to HP is called
8. In projections of a line the apparent inclination is smaller than the true inclination. True or False?

9. Isometric projection is a sub-type of Axonometric projection. True or False?





Marks scored out of 20

For official use (students shall not write beyond this line)

I Semester 2015-2016

Test 1

Course: ME A 101 Engineering Graphics

(Closed Book)

Max Marks:20

Max Time: 50 Minutes

Weightage: 10 % 26 October 2015

Set A

Instructions to Candidates

1. Use pencils for all drawings

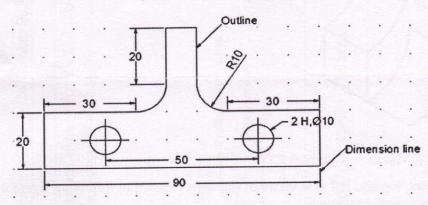
2. Answer all questions in bubble sheet (A3 size) only

3. Follow 3rd angle projection unless stated otherwise

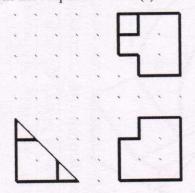
4. Do not use rulers or other geometric instruments, all figures are to be drawn as free hand sketches only

#### PART A $(2 \times 3 \text{ Marks} = 6 \text{ Marks})$

1. Redraw the following figure with dimensions. Correct errors in dimensioning, if any.

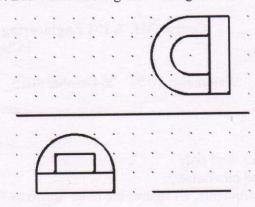


2. Draw the following given views and find the missing line(s). Draw the missing line(s) in the respective view(s).

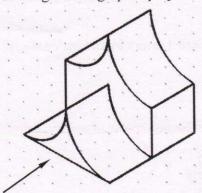


### PART B (2 X 4 Marks = 8 Marks)

3. Draw the missing view using the following TWO given views.

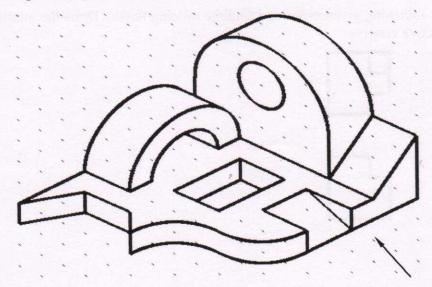


4. Draw the front, top and right side views of the object shown in following figure using 3rd angle orthographic projection.



### PART C (1 X 6 Marks = 6 Marks)

5. Draw the front, top and left side views of the object shown in following figure using 3rd angle orthographic projection.



I Semester 2015-2016

Test 1

Course: ME A 101 Engineering Graphics

(Closed Book)

Max Marks:20

Max Time: 50 Minutes

Weightage: 10 % 26 October 2015

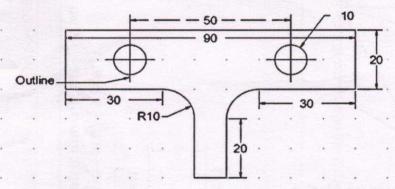
Set B

#### Instructions to Candidates

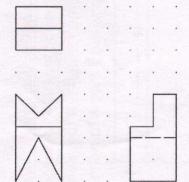
- 1. Use pencils for all drawings
- 2. Answer all questions in bubble sheet (A3 size) only
- 3. Follow 3rd angle projection unless stated otherwise
- 4. Do not use rulers or other geometric instruments, all figures are to be drawn as free hand sketches only

#### PART A $(2 \times 3 \text{ Marks} = 6 \text{ Marks})$

1. Redraw the following figure with dimensions. Correct errors in dimensioning, if any.

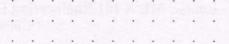


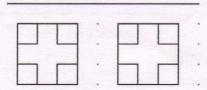
2. Draw the following given views and find the missing line(s). Draw the missing line(s) in the respective view(s).



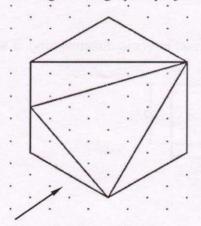
### PART B (2 X 4 Marks = 8 Marks)

3. Draw the missing view using the following TWO given views.



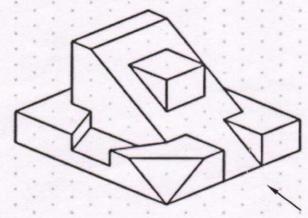


4. Draw the front, top and right side views of the object shown in following figure using 3rd angle orthographic projection.



### PART C (1 X 6 Marks = 6 Marks)

5. Draw the front, top and left side views of the object shown in following figure using 3rd angle orthographic projection.



21/10

## Presidency University, Bengaluru School of Engineering

1/12/15

I Semester 2015-2016

Test 1 (Mu)

Course: ME A 101 Engineering Graphics

(Closed Book)

Max Marks:20

Max Time: 50 Minutes

Weightage: 10 % 26 October 2015

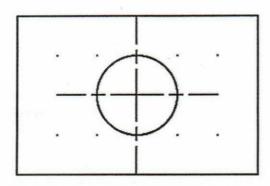
Set C

Instructions to Candidates

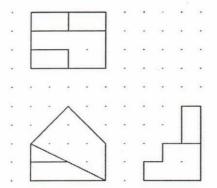
- 1. Use pencils for all drawings
- 2. Answer all questions in bubble sheet (A3 size) only
- 3. Follow 3rd angle projection unless stated otherwise
- 4. Do not use rulers or other geometric instruments, all figures are to be drawn as free hand sketches only

#### PART A (2 X 3 Marks = 6 Marks)

1. Redraw the following figure with dimensions.

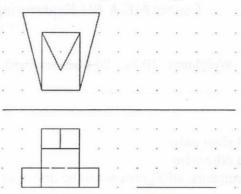


2. Draw the following given views and find the missing line(s). Draw the missing line(s) in the respective view(s).

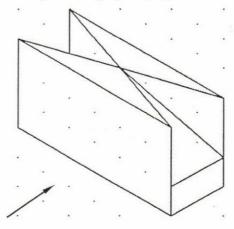


### PART B (2 X 4 Marks = 8 Marks)

3. Draw the missing view using the following TWO given views.

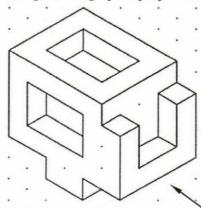


4. Draw the front, top and right side views of the object shown in following figure using 3rd angle orthographic projection.



## PART C (1 X 6 Marks = 6 Marks)

5. Draw the front, top and left side views of the object shown in following figure using 3rd angle orthographic projection.



I Semester 2015-2016

Test 2

Course: ME A 101 Engineering Graphics

( Closed Book - On AutoCAD)

Weightage: 10 % 30 November 2015 Set 1 Max Time: 50 Minutes Max Marks:20

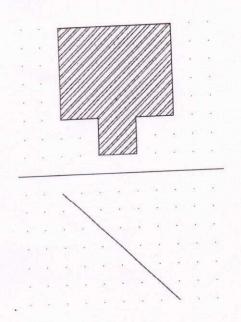
Instructions to Candidates

1. Follow all instructions displayed in the lab carefully

Print ID number in the drawing sheet using text command.

Q.1. A line AB, 100mm long is parallel to both HP and VP. Point A is located at a distance 10mm behind VP and on HP. Draw the projections of the line. 4 Marks

Q.2. Draw the true shape of the shaded surface. 6 Marks



Q.3. A line PQ 75mm long is inclined at an angle of 45° to the HP and 30° to the V.P. The point P is 15mm above the H.P. & 20mm in front of V.P. Draw the projections of the line and find the apparent inclinations if point Q lies in the same quadrant as P. 10 Marks

I Semester 2015-2016

Test 2

Course: ME A 101 Engineering Graphics

(Closed Book - On AutoCAD)

Max Marks:20 Max Time: 50 Minutes Weightage: 10 % 30 November 2015 Set 2

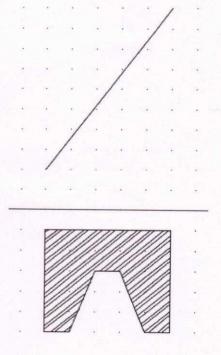
Instructions to Candidates

1. Follow all instructions displayed in the lab carefully

2. Print ID number in the drawing sheet using text command.

Q.1. Line AB, 60mm long, is parallel to VP and perpendicular to HP. Point A is located 10mm above HP and 20mm in front of VP. If point B lies in the same quadrant as A, draw the projections of the line. **4 Marks** 

Q.2. Draw the true shape of the shaded surface. 6 Marks



Q.3. A line CD, 80mm long, is inclined at 30° to HP and 40° to VP. Point C is located 20mm below HP and 30mm behind VP. Draw the projections of the line and find the apparent inclinations if point D lies in the same quadrant as C. **10 Marks** 

I Semester 2015-2016

Test 2

Course: ME A 101 Engineering Graphics

(Closed Book - On AutoCAD)

Max Marks:20 Max Time: 50 Minutes Weightage: 10 % 30 November 2015 Set 3

Instructions to Candidates

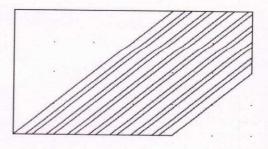
1. Follow all instructions displayed in the lab carefully

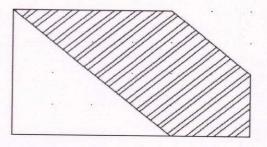
2. Print ID number in the drawing sheet using text command.

Q.1. Point A is located 40mm above HP and 40mm behind VP. Point B is located 10mm above HP and 50mm behind VP. Draw the projection of the points such that the distance between the projectors is 30 mm. 4 Marks

Q.2. Line CD, 50mm long, is inclined to HP at 60° and parallel to VP. Point C is located 30mm above HP and 40mm in front of VP. Draw projections of the line and plot the traces if any, if point D lies in the same quadrant as C. 6 Marks

Q.3. Draw true shape of the shaded surface. 10 Marks





I Semester 2015-2016

Test 2

Course: ME A 101 Engineering Graphics

(Closed Book - On AutoCAD)

Max Marks:20

Max Time: 50 Minutes

Weightage: 10 % 30 November 2015 Set 4

Instructions to Candidates

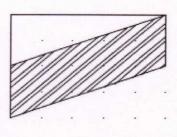
1. Follow all instructions displayed in the lab carefully

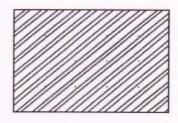
2. Print ID number in the drawing sheet using text command.

Q.1. Point A is located 10mm above HP and 20mm in front of VP. Point B is located 30mm above HP and 50mm in front of VP. Draw the projection of the points with the projectors 40 mm apart. 4 Marks

Q.2. A line CD, 60mm long, is inclined to VP at 45° and parallel to HP. Point C is located on the HP and at a distance of 20mm in front of VP. Point D lies above HP and in front of VP. Draw the projections of the line and plot the traces if any. 6 Marks

Q.3. Draw true shape of the shaded surface. 10 Marks





I Semester 2015-2016

Test 2

Course: ME A 101 Engineering Graphics

(Closed Book - On AutoCAD)

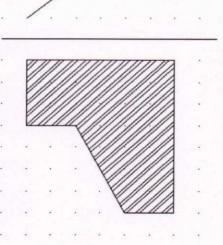
Max Marks:20 Max Time: 50 Minutes Weightage: 10 % 30 November 2015 Set 5

Instructions to Candidates

- 1. Follow all instructions displayed in the lab carefully
- 2. Print ID number in the drawing sheet using text command.

Q.1. A line AB,75mm long, is inclined to HP at 20° and parallel to VP. Point A is located 40mm above HP and in front of VP. If point B lies in the same quadrant as A, draw the projections of the line. **4 Marks** 

Q.2. Draw the true shape of the shaded surface. 6 Marks



Q.3. A line, CD 65mm long, is inclined at 20° to HP and 35° to VP. Point C is located 30mm below HP and 20mm behind VP. If point D lies in same quadrant as C, find the apparent lengths and apparent inclinations of line CD. **10 Marks** 

I Semester 2015-2016

Test 2

Course: ME A 101 Engineering Graphics

(Closed Book - On AutoCAD)

Max Marks:20 Max Time: 50 Minutes

Weightage: 10 % 30 November 2015 Set 6

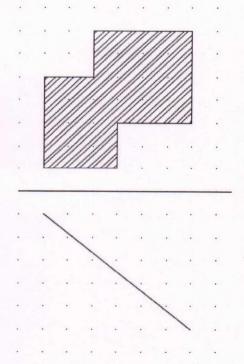
Instructions to Candidates

1. Follow all instructions displayed in the lab carefully

2. Print ID number in the drawing sheet using text command.

Q.1. A line AB,70mm long, is inclined to VP at 25° and parallel to HP. Point A lies 20mm below HP and 30mm behind VP. If point B lies in the same quadrant as A, draw the projections of the line. 4 Marks

Q.2. Draw the true shape of the shaded surface. 6 Marks



Q.3. Line EF,90mm long, is inclined 30° to HP and 40° to VP. Its end E 60 mm above HP and 40 mm in front of VP. If F lies in the same quadrant as E, find the apparent length and apparent inclinations of line EF. 10 Marks

I Semester 2015-2016

Test 2

Course: ME A 101 Engineering Graphics

(Closed Book - On AutoCAD)

Max Marks: 20 Max Time: 50 Minutes Weightage: 10 % 30 November 2015 Set 7

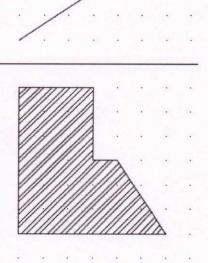
Instructions to Candidates

1. Follow all instructions displayed in the lab carefully

2. Print ID number in the drawing sheet using text command.

Q.1. A line DE, 70mm long, is inclined to VP at an angle of 50° and parallel to HP. Point D is located 10mm above HP and 40mm in front of VP. If point E lies in the same quadrant as D, draw the projections of the line DE. **4 Marks** 

Q.2. Draw the true shape of the shaded surface. 6 Marks



Q.3. Line FG has its end F 20 mm above HP and 10 mm in front of VP. The apparent inclination of line FG with HP is 35° and with VP is 20°. The projector distance between these ends is equal to 150 mm. Draw the projections of FG and show its true length, angle with HP and VP. 10 Marks

I Semester 2015-2016

Test 2

Course: ME A 101 Engineering Graphics

(Closed Book - On AutoCAD)

Max Marks:20 Max Time: 50 Minutes Weightage: 10 % 30 November 2015 Set 8

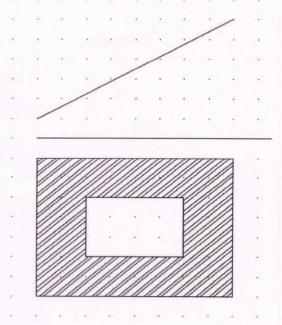
Instructions to Candidates

1. Follow all instructions displayed in the lab carefully

2. Print ID number in the drawing sheet using text command.

Q.1. A line EF is inclined to HP at an angle of 15° and parallel to VP. The point E is located 30mm below HP and 50mm behind VP. Draw the projections of the line if F lies in the same quadrant as E. **4 Marks** 

Q.2. Draw the true shape of the shaded surface. 6 Marks



Q.3. A line GH has its end G at a distance of 50mm below HP and 30mm behind VP. The apparent inclination of line GH with HP is 45° and with VP is 20°. If the distance between the end projectors is 100mm and point H lies in the same quadrant as G, find the true length and true inclination of line GH. **10 Marks** 

I Semester 2015-2016

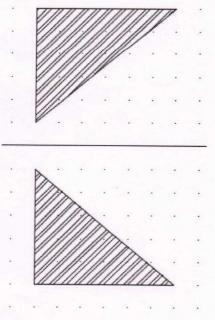
Test 2

Course: ME A 101 Engineering Graphics

(Closed Book - On AutoCAD)

Max Marks:20 Max Time: 50 Minutes Weightage: 10 % 30 November 2015 Set 9

- 1. Follow all instructions displayed in the lab carefully
- 2. Print ID number in the drawing sheet using text command.
- Q.1. A line CD, 85mm long, is parallel to both HP and VP. Point C is located 20mm above HP and on VP. Draw the projections of the line CD. **4 Marks**
- Q.2. A line EF,100mm long, is inclined to VP at an angle of 20° and parallel to HP. The point E is located 30mm below HP and 50mm behind VP. Draw the projections of the line and plot the traces if any. **6 Marks**
- Q.3. Draw true shape of the shaded surface. 10 Marks



I Semester 2015-2016

Test 2

Course: ME A 101 Engineering Graphics

(Closed Book - On AutoCAD)

Max Marks:20 Max Time: 50 Minutes Weightage: 10 % 30 November 2015 Set 10

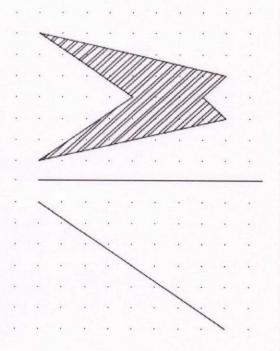
Instructions to Candidates

1. Follow all instructions displayed in the lab carefully

2. Print ID number in the drawing sheet using text command.

Q.1. A line MN, 85mm long, is perpendicular to VP and parallel to HP. Point M is located 40mm above HP and 50mm in front of VP. Draw the projections of the line, if point N is located in the same quadrant as M. 4 Marks

Q.2. Draw true shape of the shaded surface. 6 Marks



Q.3. A line PQ, 85mm long, is inclined to HP at 50° and to VP at 25°. Point P is located 30mm above HP and on VP . Point Q lies above HP and in front of VP. Draw the apparent lengths and find the apparent inclinations. 10 Marks