CBCS SCHEME

USN | | | | | | | | | |

18EGDL15/25

First/Second Semester B.E. Degree Examination, December 2019

ENGINEERING GRAPHICS

Time: 3 Hours **(COMMON TO ALL BRANCHES)** Max. Marks: 100

Note: 1. Answer three full questions. 2. Use A4 sheets supplied.
3. Draw to actual scale. 4. Missing data, if any, may be assumed suitably.

1. A line AB measuring 70 mm has its end A 15 mm in front of VP and 20 mm above HP and other end B is 60 mm in front of VP and 50 mm above HP. Draw the projections of the line and find the inclinations of the line with both the reference planes of the projection.

25 Marks

OR

1. An equilateral triangular lamina of 25 mm side lies with one of its edges on HP such that the surface of the lamina is inclined to HP at 60^0. The edge on which it rests is inclined to VP at 60^0. Draw the projections.

25 Marks

2. A pentagonal pyramid of 25 mm sides of base and 50 mm axis length rests on HP on one of its slant edges. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45^0.

45 Marks

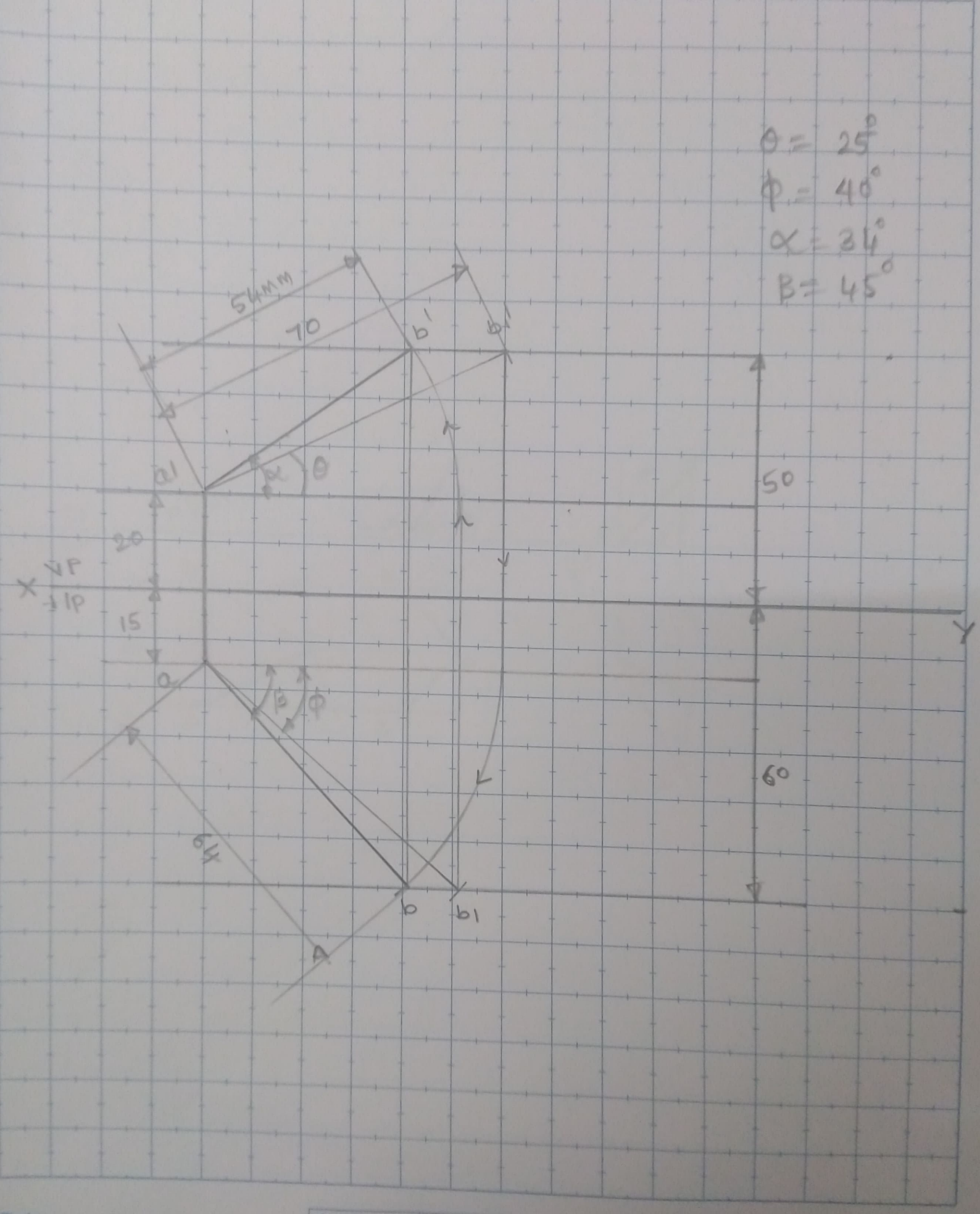
3. A vertical cylinder of base diameter 50 mm and axis length 60 mm is cut by two planes which are perpendicular to VP and inclined at 45^0 to HP and passing through either side the centre point of the top face. Draw the development of the lateral surface of the cylinder.

30 Marks

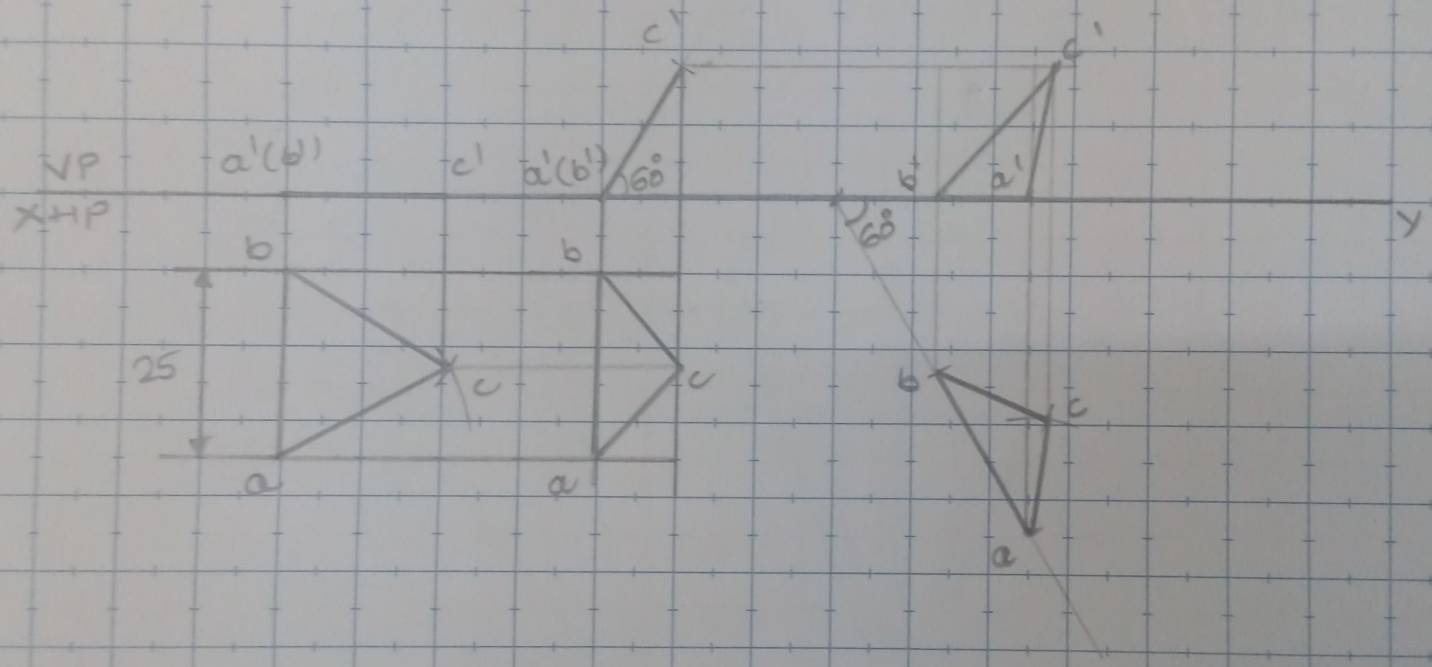
OR

3. A Sphere diameter 40 mm is placed centrally on the flat face of a hemisphere diameter 60 mm. Draw the isometric projection of the combination.

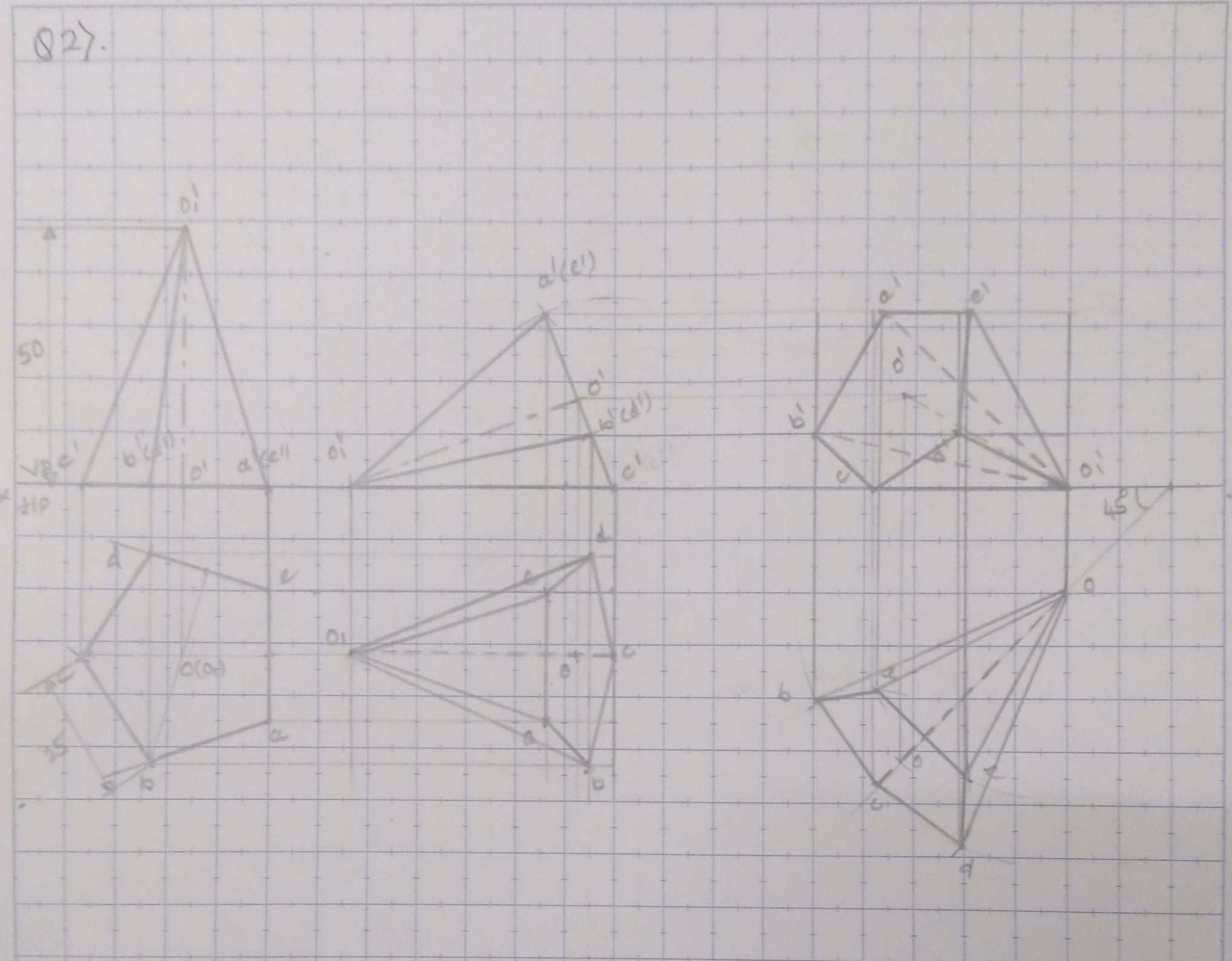
30 Marks


θ = 25°
ϕ = 40°
α = 34°
β = 45°
54mm
70
a'
b'
b1'
α
θ
50
20
15
X
VP
HP
Y
a
β
ϕ
60
a1
b
b1

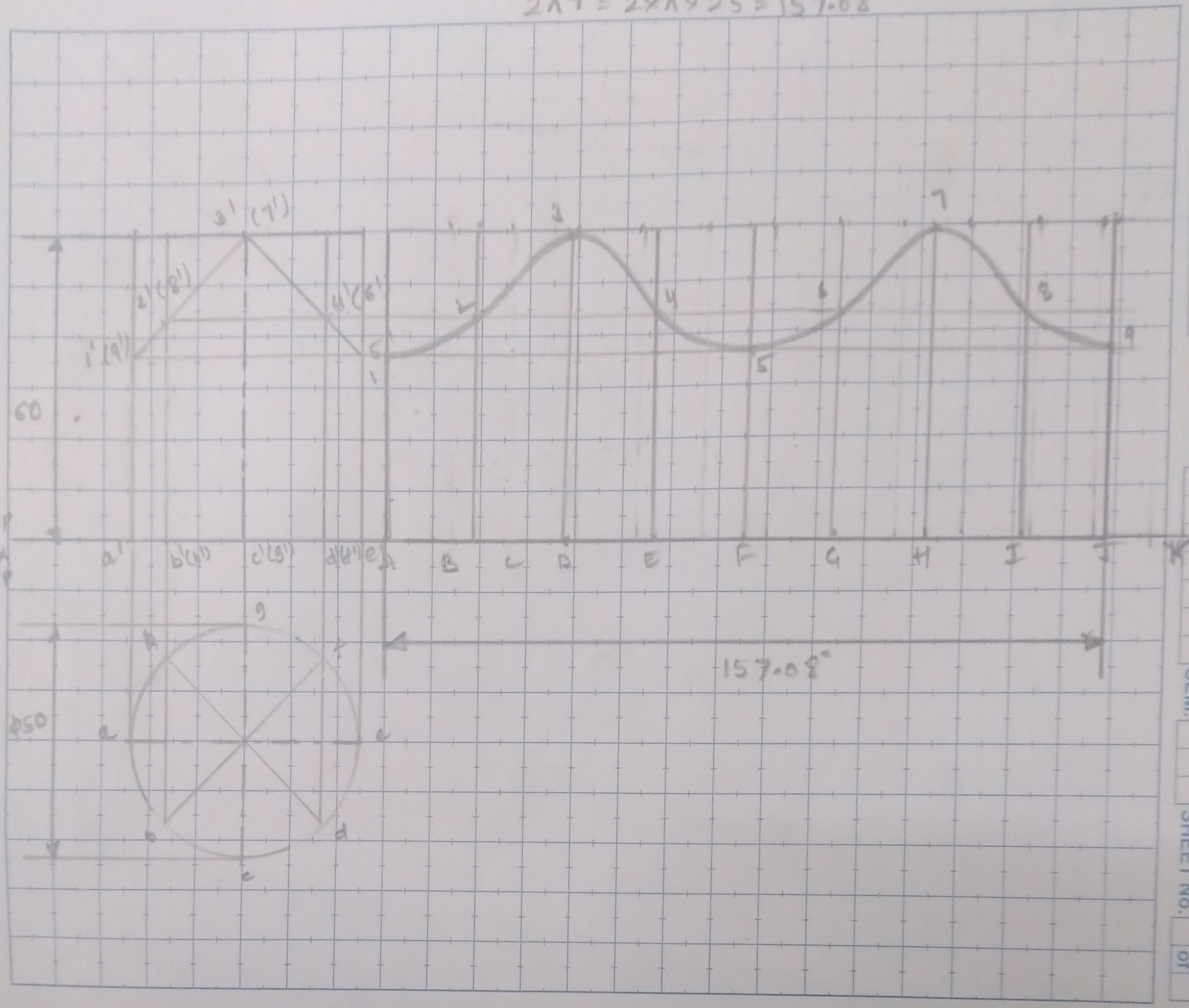
27



Q2).



$2\pi r = 2 \times \pi \times 25 = 157.08$



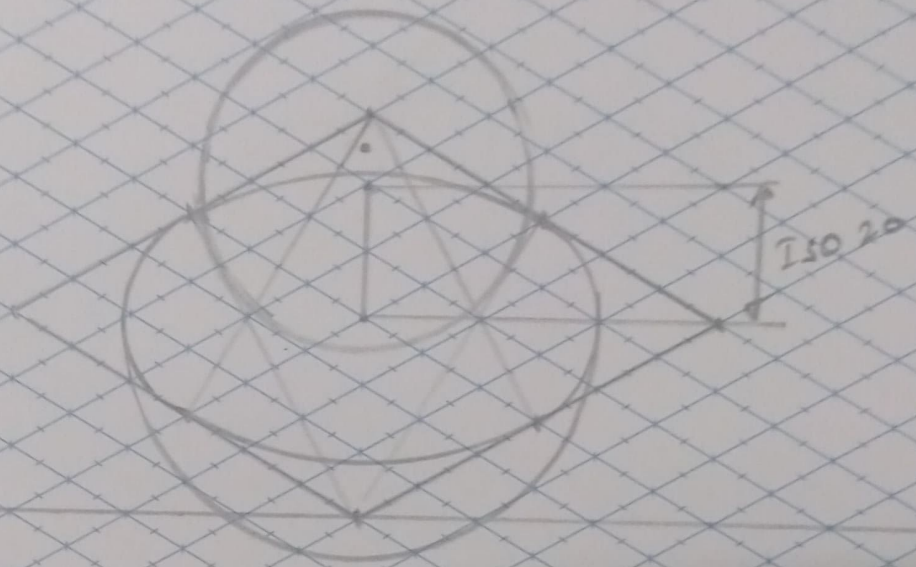
Date : _____

Scale : Unit = 10 mm

STAFF SIGNATURE : _____

SEM.

SHEET No. of


150 20