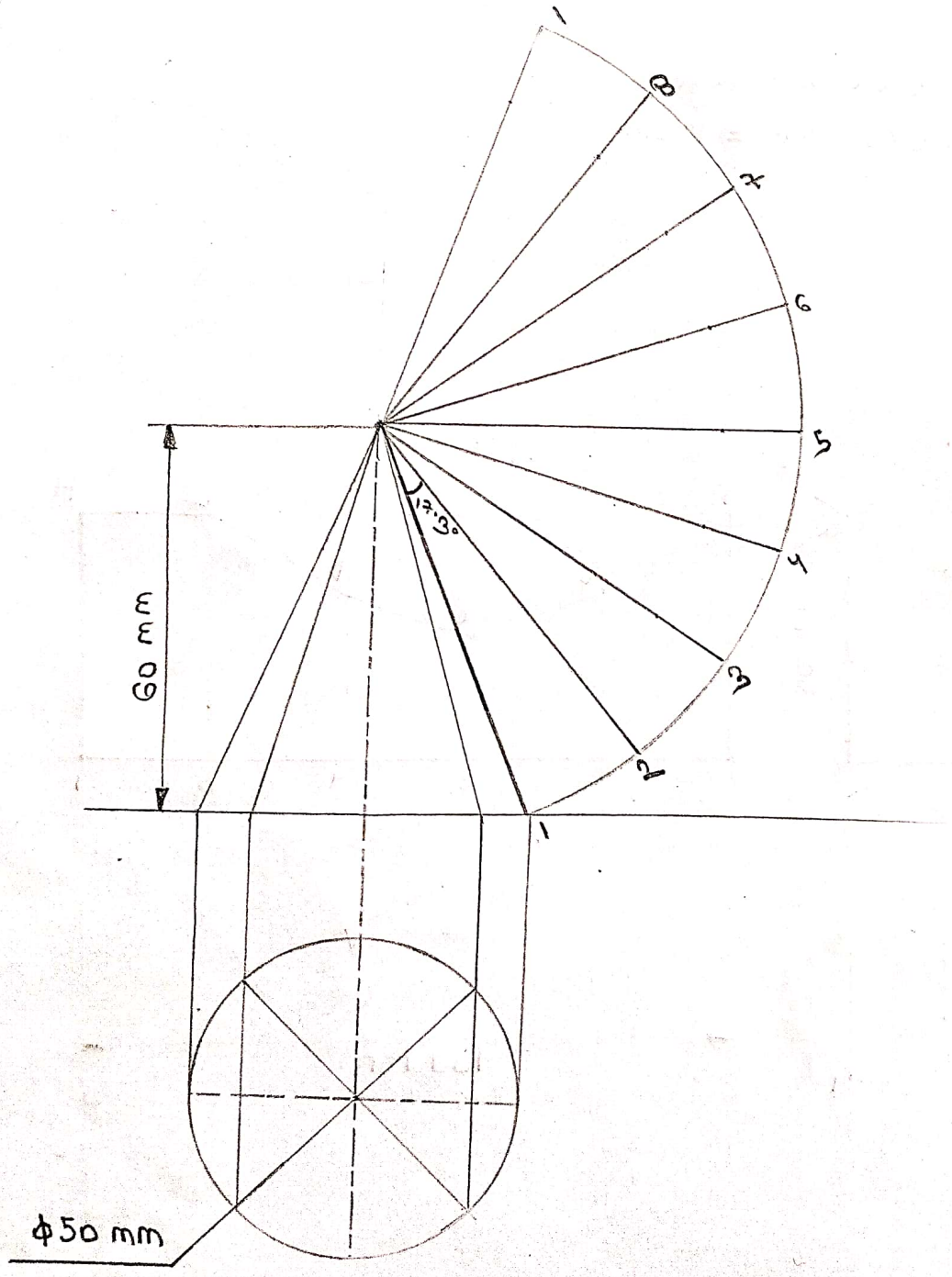
Anmol Baarwal --2820208 [A7]

Q. Develop the surface of a right circular cone of 50 mm base diameter and axis 60 mm long. Calculate the subtended angle θ by the arc at center.

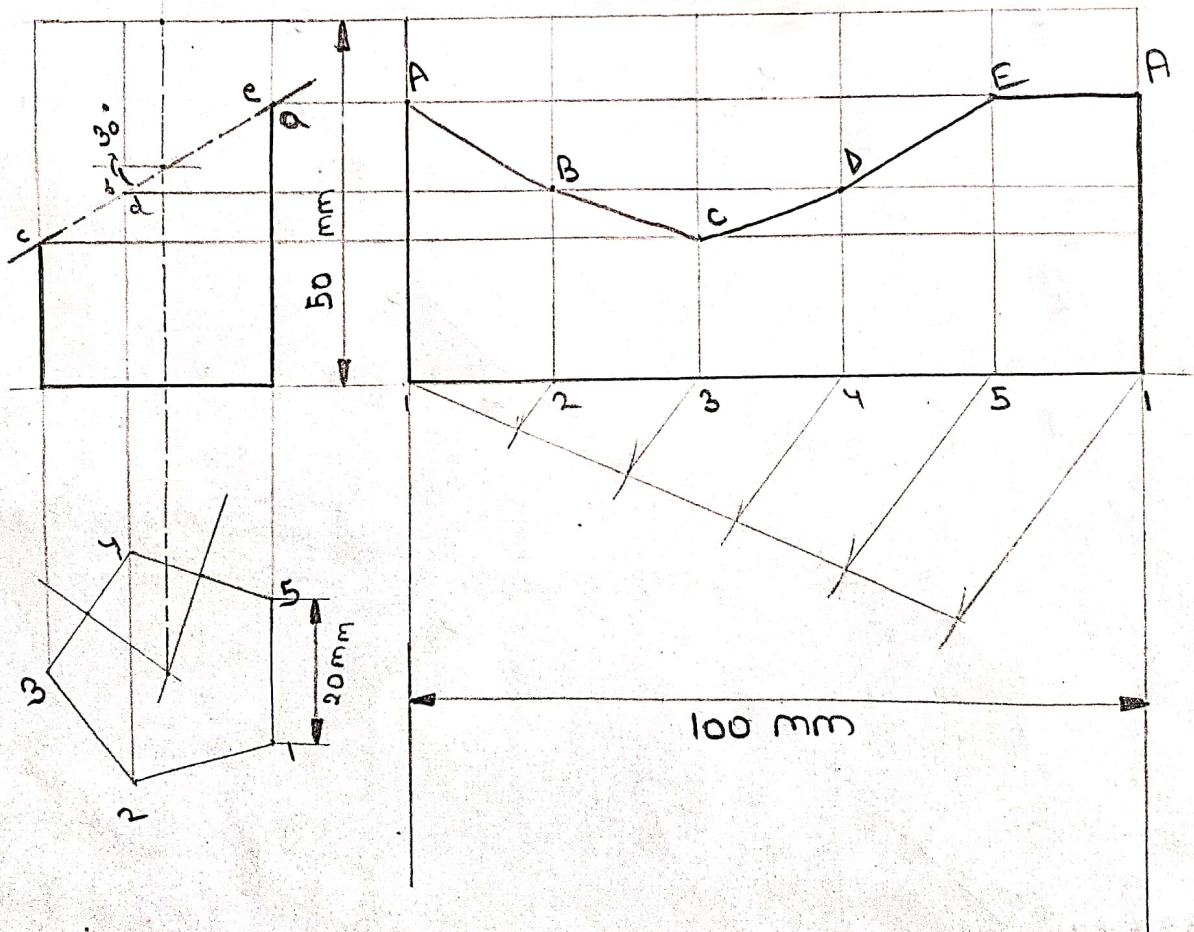
$$\theta = 360^\circ \times \frac{\text{radius of cone}}{\text{slant edge of cone}} \Rightarrow 360^\circ \times \frac{25}{65} \Rightarrow 138.5^\circ$$



Amol Baravkal--2820208 [A]

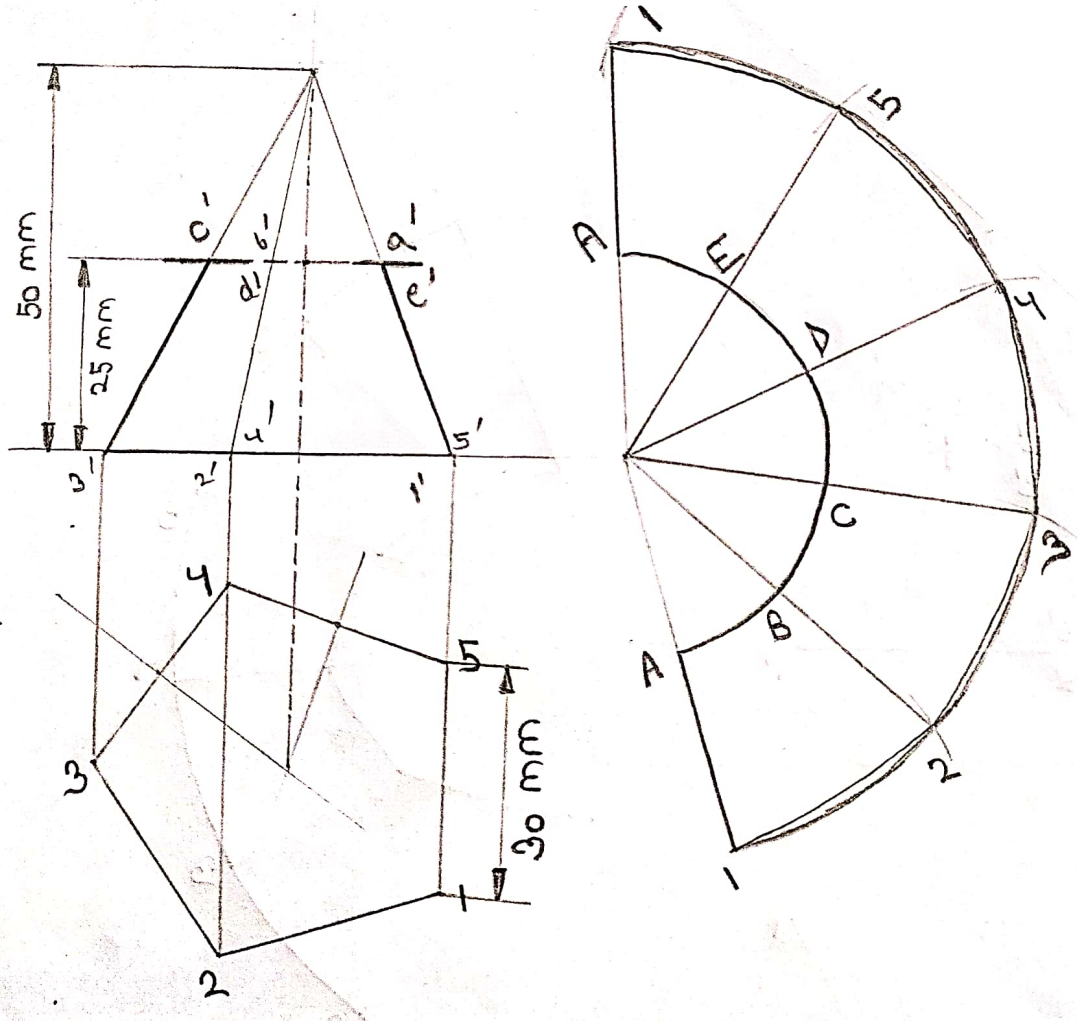
2. A right regular pentagonal prism edge of base 20 mm and height 50 mm rests on its base with one of its base edge ⊥ to VP and auxillary inclined plane inclined to HP at 30° and ⊥ to VP cuts its axis at a distance of 30 mm from the base. Develop the development surface of truncated prism.

length ⇒ 5 × base edge
⇒ 5 × 20 mm ⇒ 10 cm



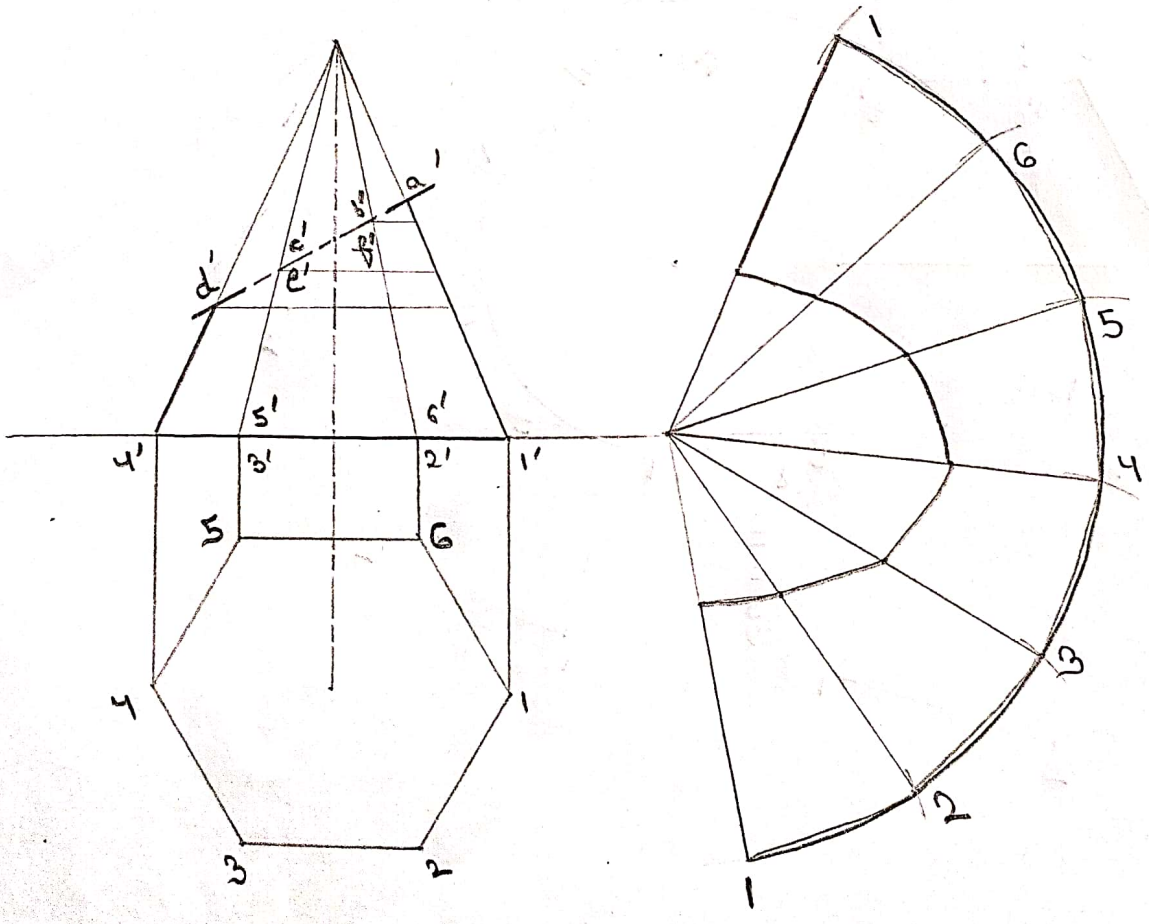
Anmol Baraiwal --2820208

Q A right regular pentagonal pyramid edge of base 30 mm, height 50 mm rests on its base with one of its base edge ⊥ to VP. A section plane ⊥ to VP and ∥ to HP cuts the pyramid bisecting its axis. Draw its F.V., sectional T.V. and develop the lateral surface of the remaining pyramid.



Ahmed Basavaraj --- 2820208

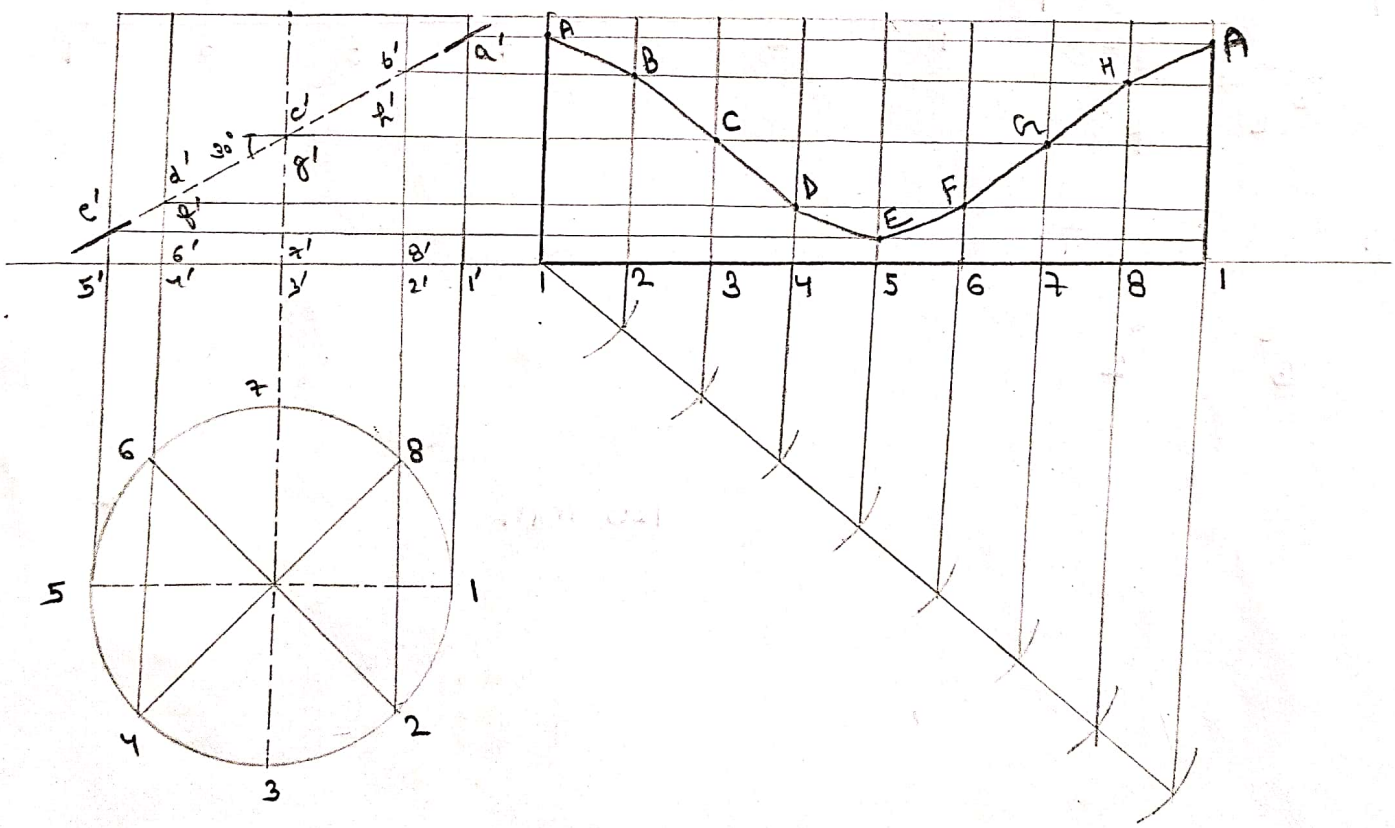
Q. A right regular hexagonal pyramid edge of base 25 mm, height = 55 mm rest on its base in HP with one of its base edge ⊥ to VP. A section plane ⊥ to VP and inclined to HP at 30° and cuts the pyramid bisecting its axis. Draw its F.V., sectional T.V. and develop lateral surface of remaining pyramid.



Nitin Baraiwal --2820208

Q. A right cylinder of 30 mm diameter and 35 mm height of axis is cut by a section plane inclined to HP and passes 18 mm from base along axis. Draw development of cylinder.

length = $2\pi r$ ⇒ 6.28×15 mm ⇒ 94.2 mm



Anmol Baarulal --2820208 [A]

Q. Develop the lateral surface of a regular hexagonal prism of 20 mm base edge and 50 mm height.

length (l) ⇒ no. of sides × base edge ⇒ 6 × 20 ⇒ 120 mm