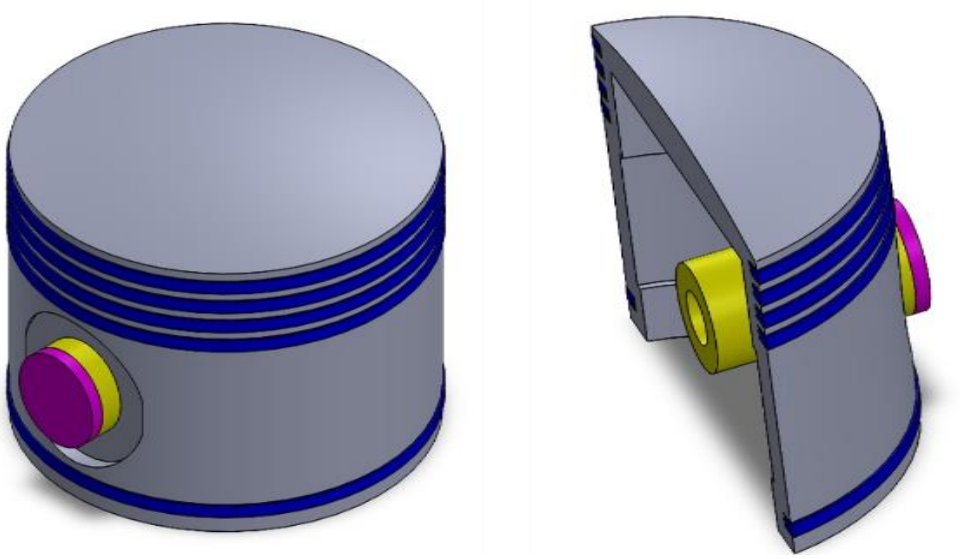
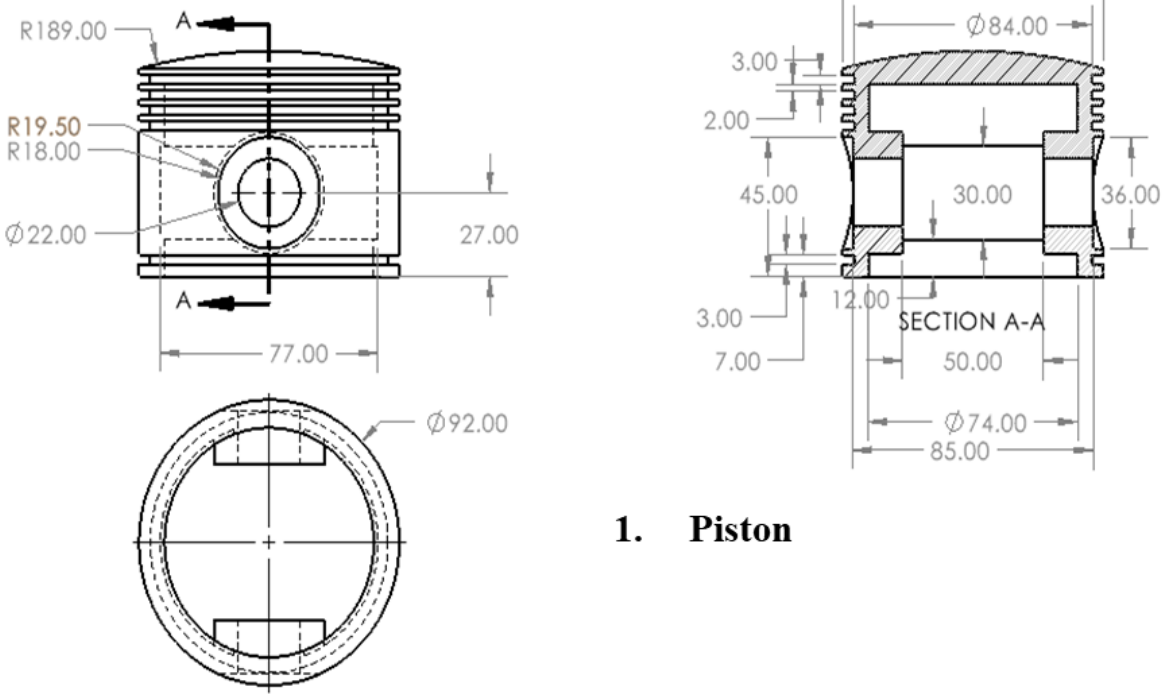
Tutorial – 15

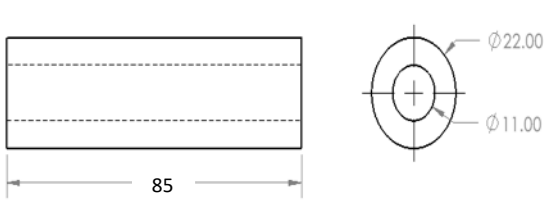
1) Using the following dimensions, design a **Piston assembly** in Solid Works and submit the following results.
   i. An isometric view and the exploded isometric view with proper ballooning and BOM.
   ii. Show the Orthographic view of Piston Assembly.



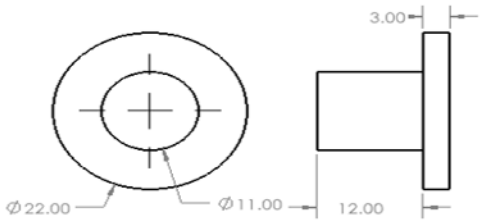
Piston Assembly



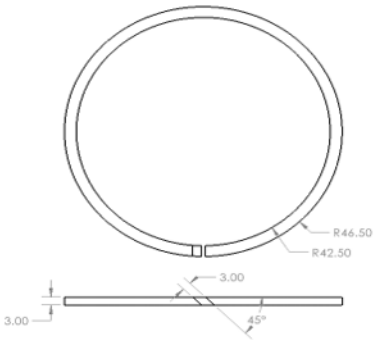
1. Piston



2. Piston Pin



3. Piston pin Plug



4. Piston ring

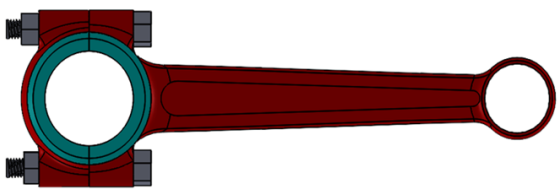
Part No.	Name	Material	Quantity
1	Piston	Al-alloy	1
2	Piston Pin	HCS	1
3	Piston Pin plug	HCS	2
4	Piston ring	CI	5

2) Using the following dimensions, design a **Connecting rod** assembly in Solid Works and submit the following results**.**

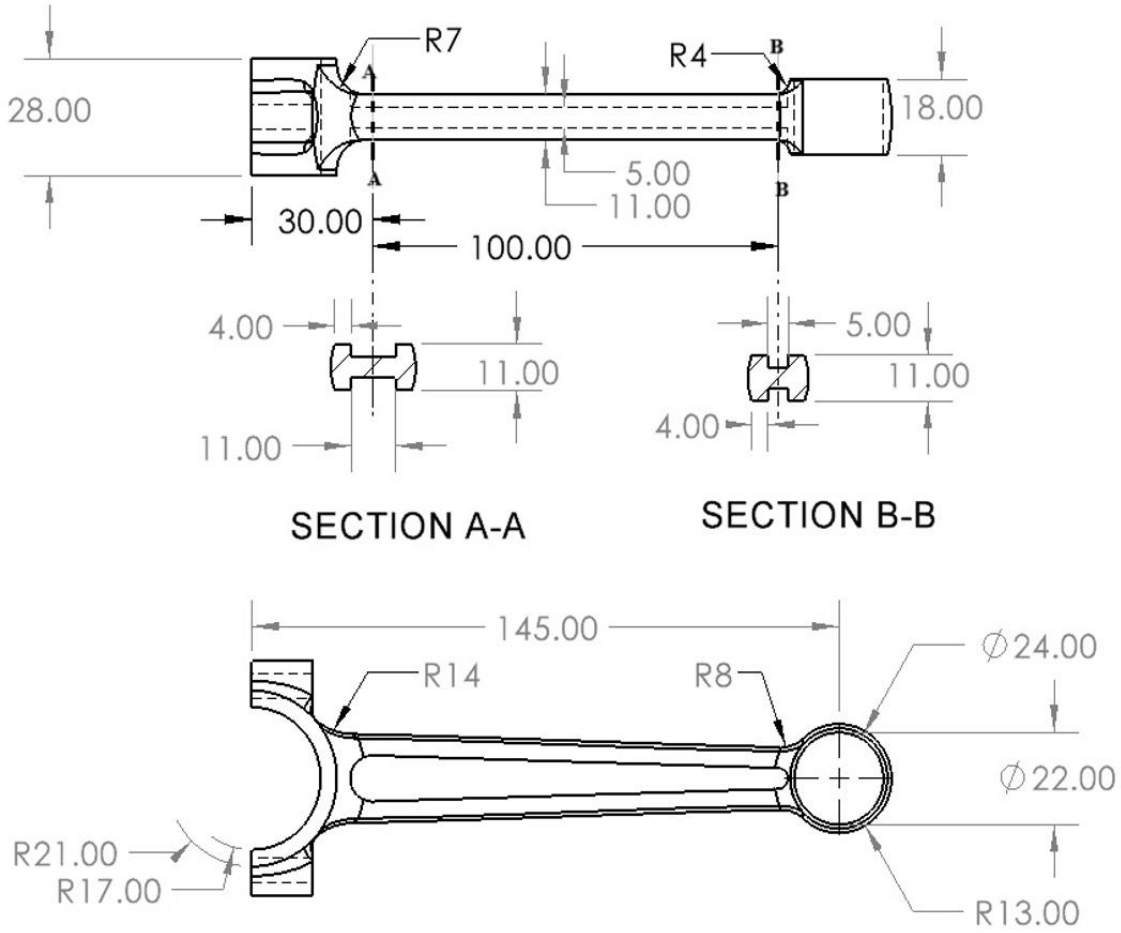
i. An isometric view of connecting rod assembly and the exploded isometric view with proper ballooning and BOM.

ii. Show the orthotropic view of each part of connecting rod with proper dimensioning.

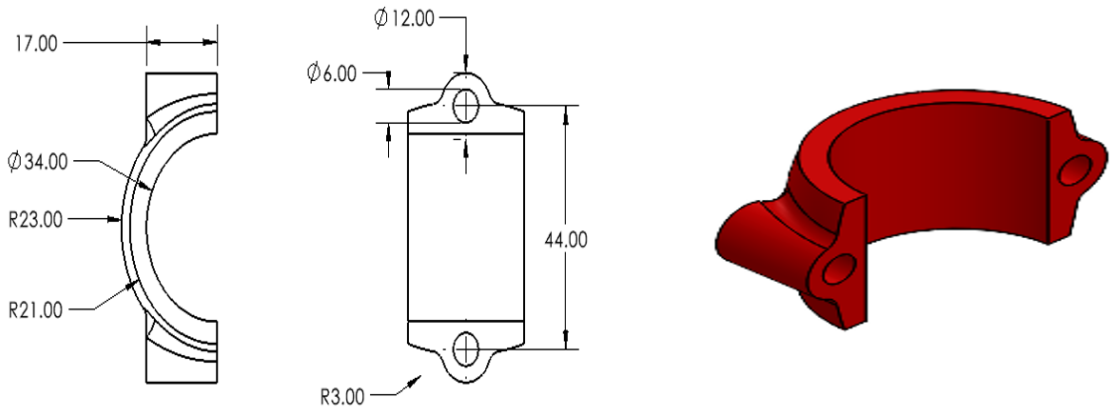
iii. Give the isometric view and exploded view of **piston with connecting rod assembly**.



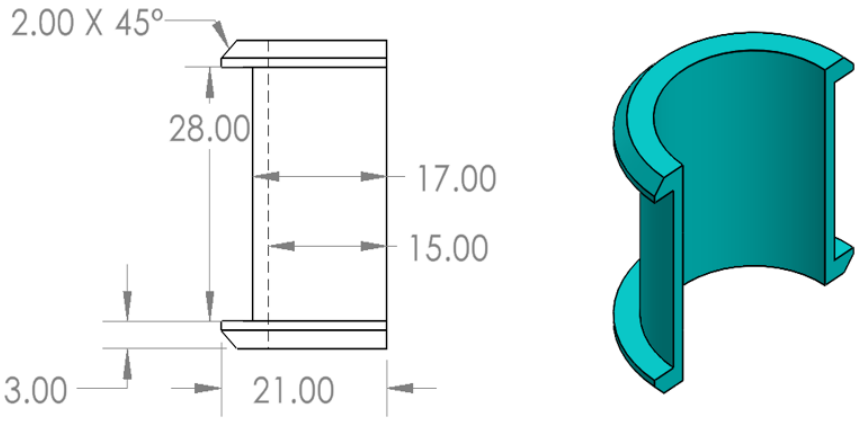
Connecting rod assembly



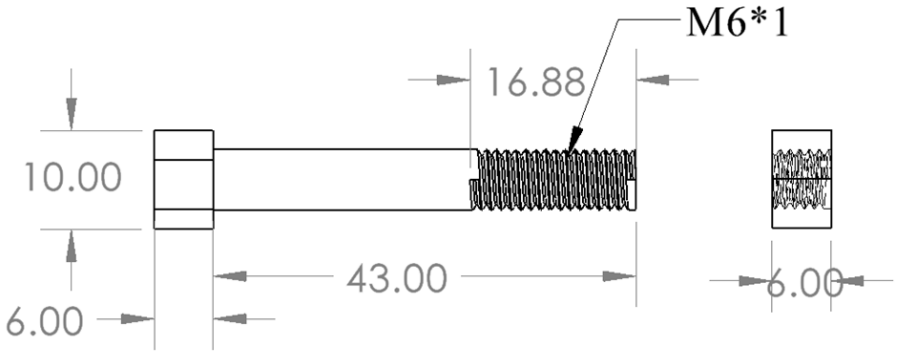
1. Connecting rod



2. Connecting cap

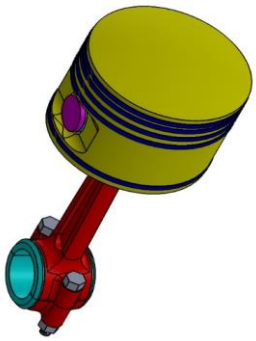


3. Bearing Brass



4.Bolt **5.Nut**

Part No.	Name	Quantity
1	Connecting rod	1
2	Connecting cap	1
3	Bearing brass	2
4	Bolt	2
5	Nut	2



Assembly of piston and connecting rod