INDIAN INSTITUTE OF TECHNOLOGY, BOMBAY
Department of Mechanical Engineering
ME-119 Engineering Drawing & Graphics *2017-18 Semester II*

Sheet 11: Solidworks

For this sheet, you need to make parts and assembly drawings on SolidWorks. Click on the Solidworks icon on the desktop, and click on "New file" icon on top left to start drawing. Note: Solidworks can sometimes take upto 10 mins to start. The specific exercise(s) will be selected from the file **solidworks_problems_2017_2.pdf** by the lab instructor. Parts and assembly drawings have been provided for the following:

1. Page 1-7: Shaft-rotor assembly
2. Page 8-12: Foot Step Bearing
3. Page 13-21: Universal Coupling

This file has been uploaded on moodle, and this file has also been kept in the shared network directory on the Drawing Hall PCs.

For the exercise given by the instructor:

1. Make solid model of each part, and save the .SLDPRT files
2. Assemble the parts into a .SLDASM file
3. Import the assembly into a drawing
4. Show **orthographic projections** (FV, TV and LHSV) AND **isometric view** for ONLY the assembly
5. Show a **sectional view** of the assembly. The sectional plane should pass through the main axis of the assembly.
6. **Dimension** ONLY the orthographic projections of the assembly
7. Show a **Bill of Materials** of the assembly (e.g. shown in the sample drawing below). This can be carried out by right clicking on the isometric view of the assembly, and then clicking Tables->Bill of materials.
8. DO NOT use more than 2 sheets. You may scale the projections and assembly to fit the sheets. Ideally you should be able to use only 1 sheet for most of the problems.
9. Mark your name, roll number, sheet number and batch number etc in the **Title Block**, as shown in the drawing below (you can either insert a "note" or right click and select "edit text" for this).
10. To convert file to pdf, you need to print file, and choose "pdfcreator" as the printer. Make sure you choose A3 paper size (landscape mode) and "scale to fit" in the page setup.
11. Save the ONLY the pdf of your sheets in A3 format in the usual network directory for sheet 11. There is NO NEED to save the .SLDPRT files, .SLDASM files etc. in the network directory.

A sample drawing has been provided in the next page

Sample drawing