



Skill India
कौशल भारत - कुशल भारत



India Skills



INDIA SKILL KERALA 2018

STATE LEVEL COMPETITION

Dummy Question Paper

SKILL: MECHANICAL ENGINEERING CAD

CATEGORY: MANUFACTURING AND ENGINEERING TECHNOLOGY

Skill: MECHANICAL ENGINEERING CAD

Team Selection Competition Mechanical Fabrication

Module: Mechanical Fabrication

Time: 8.0 hours

Given: 4 Drawings

Scenario:

You have been tasked to reverse engineer of the given Model.

Task:

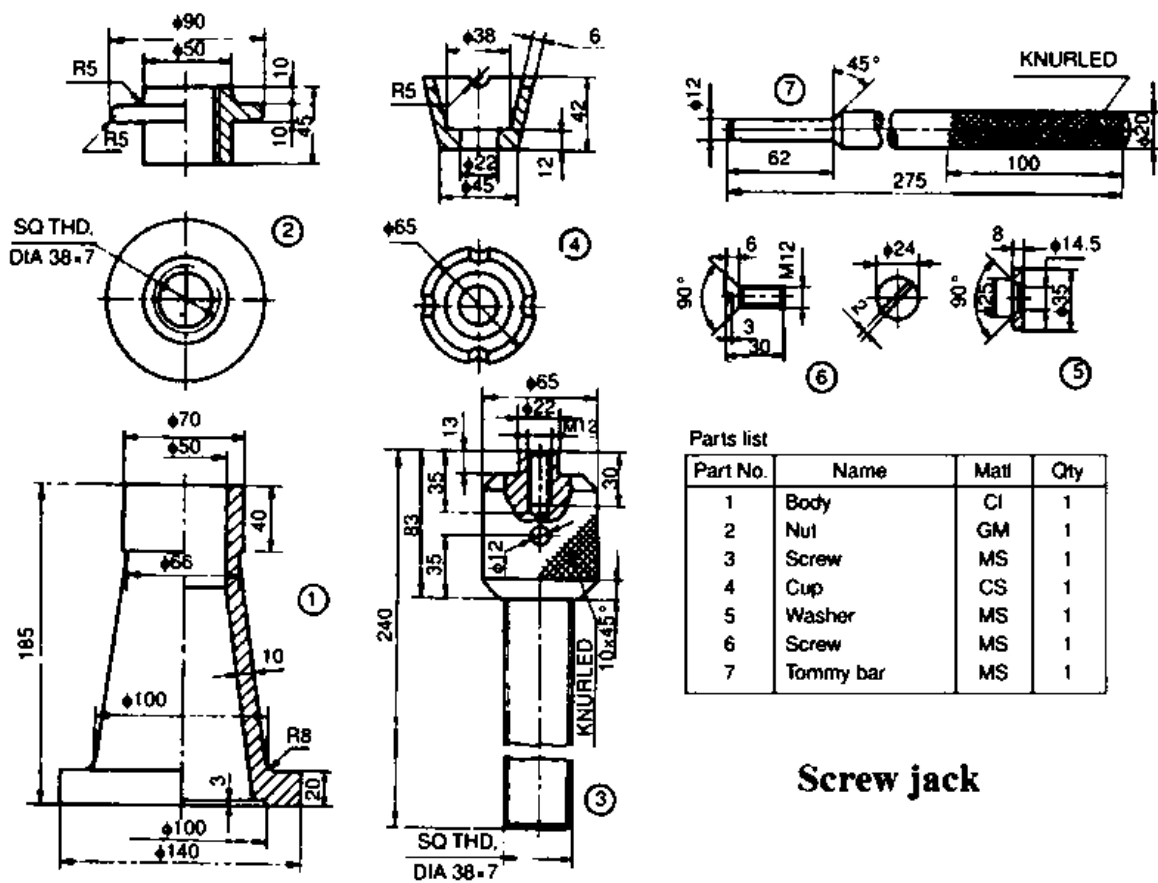
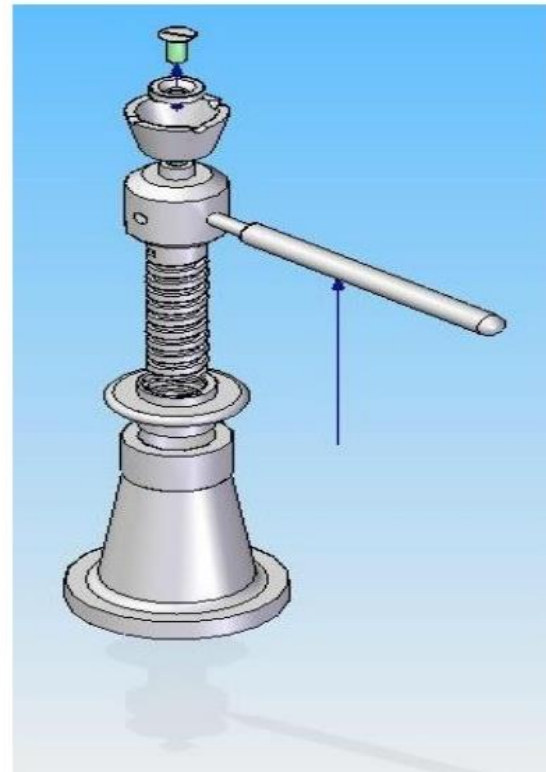
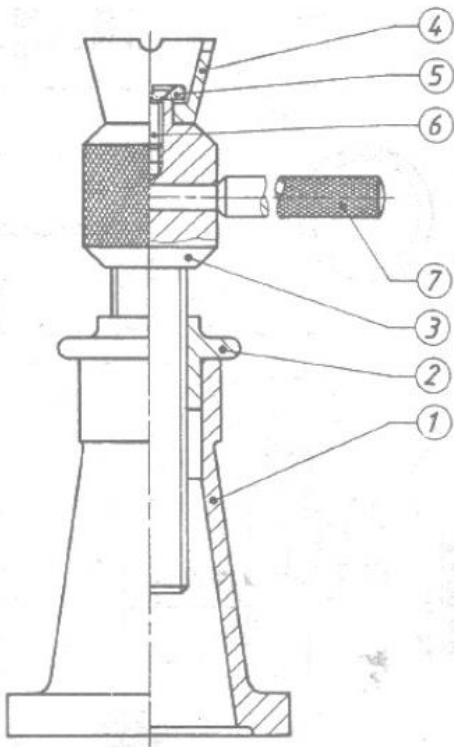
1. Create 3D models for all of the parts of the given model.
2. Create the sub-assemblies and main assembly, inserting non-modelled parts from the content center.
3. Produce the detailed drawing of the model. Include in this:
 - a) Isometric view
 - b) Orthographic views in IS standard
 - c) Top half sectional assembled view
 - d) Create BOM
 - e) Create Rendered view
4. Produce the exploded view of the multi plate clutch assembly and balloon the parts

OUTPUT

- Software Modelled Parts, Assemblies, Drawing Files with hard copies.

NOTES

- Final Printing may take place at the end of the 8 hours' competition time.
- A maximum of 2 test prints is allowed for each drawing.
- Missing information is to be completed at the competitor's discretion.
- ***All files are to be saved to a folder on your desktop which is named with your full name.***



Parts list

Part No.	Name	Matl	Qty
1	Body	CI	1
2	Nut	GM	1
3	Screw	MS	1
4	Cup	CS	1
5	Washer	MS	1
6	Screw	MS	1
7	Tommy bar	MS	1

Screw jack

Criterion ID	Criterion – Description	Max. Marks
1	Part Modeling	20
2	Assembly Modeling	30
3	Dimensioning (Inc. GD&T)	30
4	Drawing views and presentation	20
Grand Total		100

Instructions for candidates

- Read the competitor instructions carefully.
- Study the model and interpret all the details given to you.
- Take a proper attention towards all the deliverables asked for.
- Your exam will be stopped exactly after the time allotted.
- Don't attempt to talk to any other competitor.
- Always ask the exam coordinator for any clarification needed.
- Handover all the deliverables to the exam coordinator at the end of the test
- Use proper tools carefully.
- Care should be taken while handling precision measuring instruments.
- Care should be taken while dismantling and assembling the model.