CBCS SCHEME

USN | | | | | | | | | | |

18ME36A/18MEA306/18MA36

Third Semester B.E. Degree Examination, Feb./Mar. 2022

COMPUTER AIDED MACHINE DRAWING

Time: 3 Hours Max. Marks: 100

Note: 1. Answer any ONE question from each of the parts A, B and C.
2. Use **First angle** projections only.
3. If any data is missing it may be suitably assumed and mentioned.
4. All the calculations should be on the answer sheet supplied.
5. All the dimensions are in mm.
6. Drawing instruments may or may not be used for sketching.
7. Part C assembly view should be in 3-D and other views in 2-D.

Part – A

1. Draw the following profiles.
a) BSW thread and (b) Sellers thread of pitch 50mm both. **(25 Marks)**

2. Draw two views of a hexagonal headed bolt and nut with washer (assembly) for a 25mm diameter bolt. Take the length of the bolt equal to 100mm **(25 Marks)**

Part – B

3. Draw the following view of a SOCKET and SPIGOT COTTER JOINT used to joining two rods of diameter 30mm (a) Sectional front view (b) A view looking from socket end. **(25 Marks)**

4. Prepare a neat and proportionate free hand sketch of a bushed-pin type of flexible coupling to connect two shafts of 20mm diameter for the following views i) Front View with Top half in section, ii) Side view from Pin- head end. **(25 Marks)**

Part – C

5. Figure 1 shows the details of a "PLUMMER BLOCK". Assemble the Parts and show the following views.
a. Half-sectional front view showing the right half in section.
b. Top view. **(50 Marks)**

6. Figure 2 shows the part drawing of a "IC Engine Connecting Rod". Assemble parts and show the following views.
a. Sectional front view
b. Top view. **(50 Marks)**

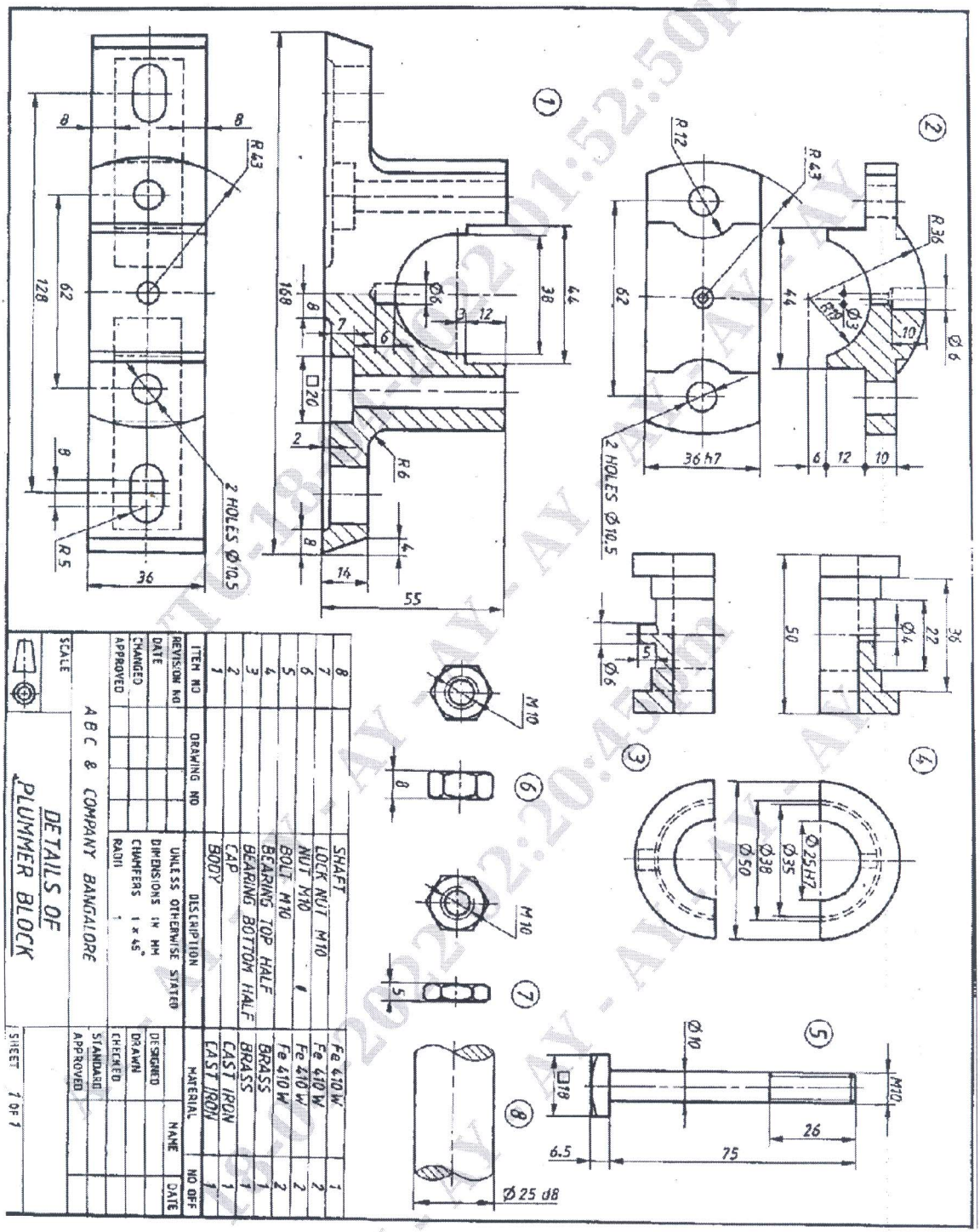

Figure 1: Details of Plummer block

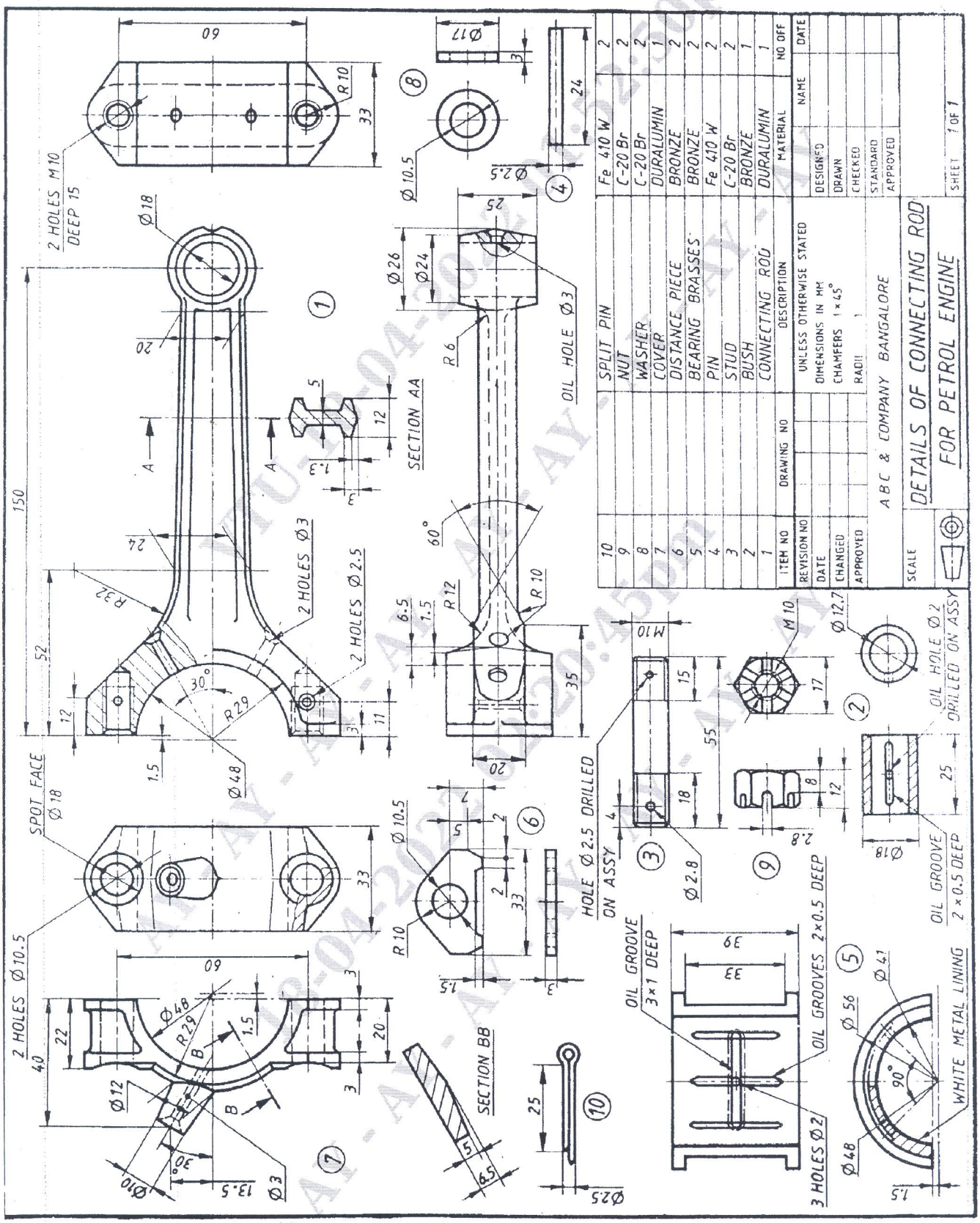

Figure 2: Details of IC Engine Connecting rod