

Roll No. Total No. of Questions : 09]

[Total No. of Pages : 04

B.Tech. (Sem. -3rd)

MACHINE DRAWING

SUBJECT CODE : ME – 207 Paper ID : [A0804]

[Note : Please fill subject code and paper ID on OMR]

Time : 04 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.
- 3) Attempt any **Two** questions from Section - C.

Section – A

(10 × 2 = 20)

- Q1)** a) Differentiate between left hand and right hand thread.
b) Draw free hand proportionate sketch of ACME thread.
c) Name any four pipe fittings.
d) Define the terms -Major Diameter and Minor diameter for a bolt.
e) Name two types of keys which essentially need to be assemble on the shaft before fitting the hub.
f) Draw the symbols for the following welded joints along with the illustrations.
- Square Butt Weld - Seam Weld
g) Discuss the use of Eccentric in a steam engine.
h) Define the following terms as related to riveted joints.
- Margin - Back Pitch
i) What is the use of component named "Feather" in tail stock assembly?
j) Which type of thread is used in Screw jack applications and why?

Section – B

(4 × 5 = 20)

- Q2)** Draw free hand proportionate neat sketches for the following
(a) Use of Stud for connecting two plates.
(b) Hoop Foundation Bolt
- Q3)** Draw Plan of single riveted butt joint (single cover) for connecting two plates of thickness 10 mm. Use appropriate empirical relations and show at least 2 rivet heads along each row of rivets. Use Pan head rivets in the joint.
- Q4)** Figure 1 shows the details of Sleeve and Cotter Joint. Assemble the given parts and draw the front view of assembly. Assume 1 in 40 taper on the cotter.
- Q5)** Figure 2 shows the details of Socket and Spigot Pipe Joint. Assemble the given parts and draw the full sectional front view of assembly.
- Q6)** Figure 3 shows the details of Universal Coupling. Assemble the given parts and draw the front view of assembly.

Section - C

(2 × 10 = 20)

- Q7)** Figure 4 shows the details of Angular Plummer Block. Assemble the given components and draw the full sectional front view of assembly.
- Q8)** Figure 5 shows the details of Machine Vice. Assemble the given components and draw the full sectional front view of assembly.
- Q9)** Figure 6 shows the details of 75 mm steam stop valve. Assemble the given components and draw the full sectional front view of assembly.

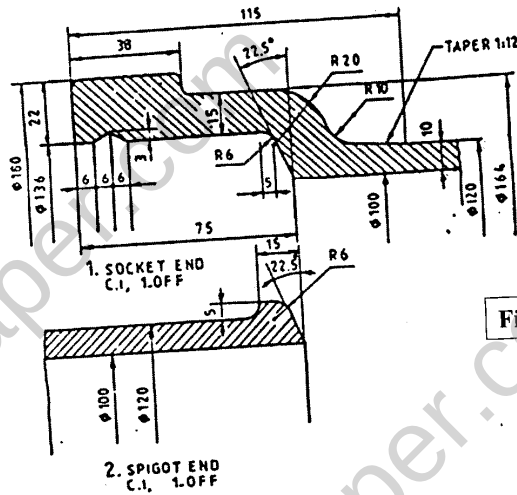
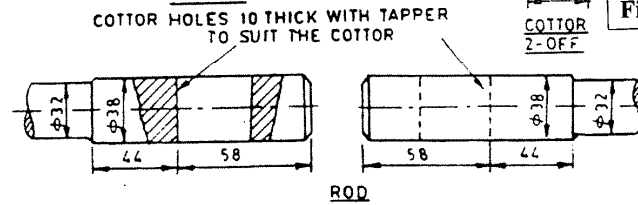
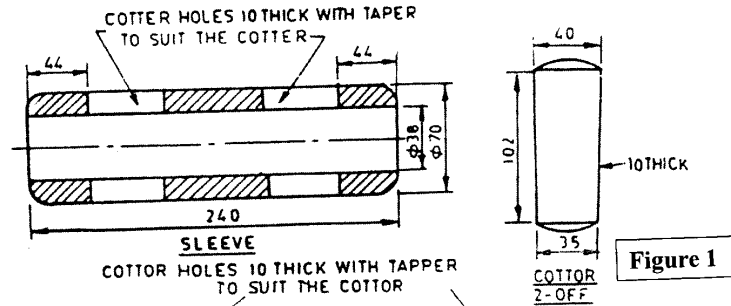
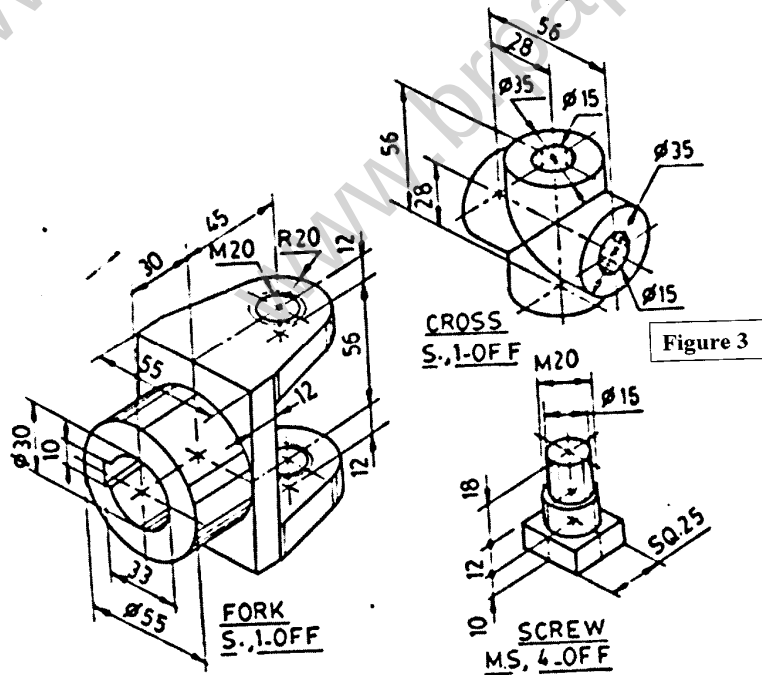


Figure 2



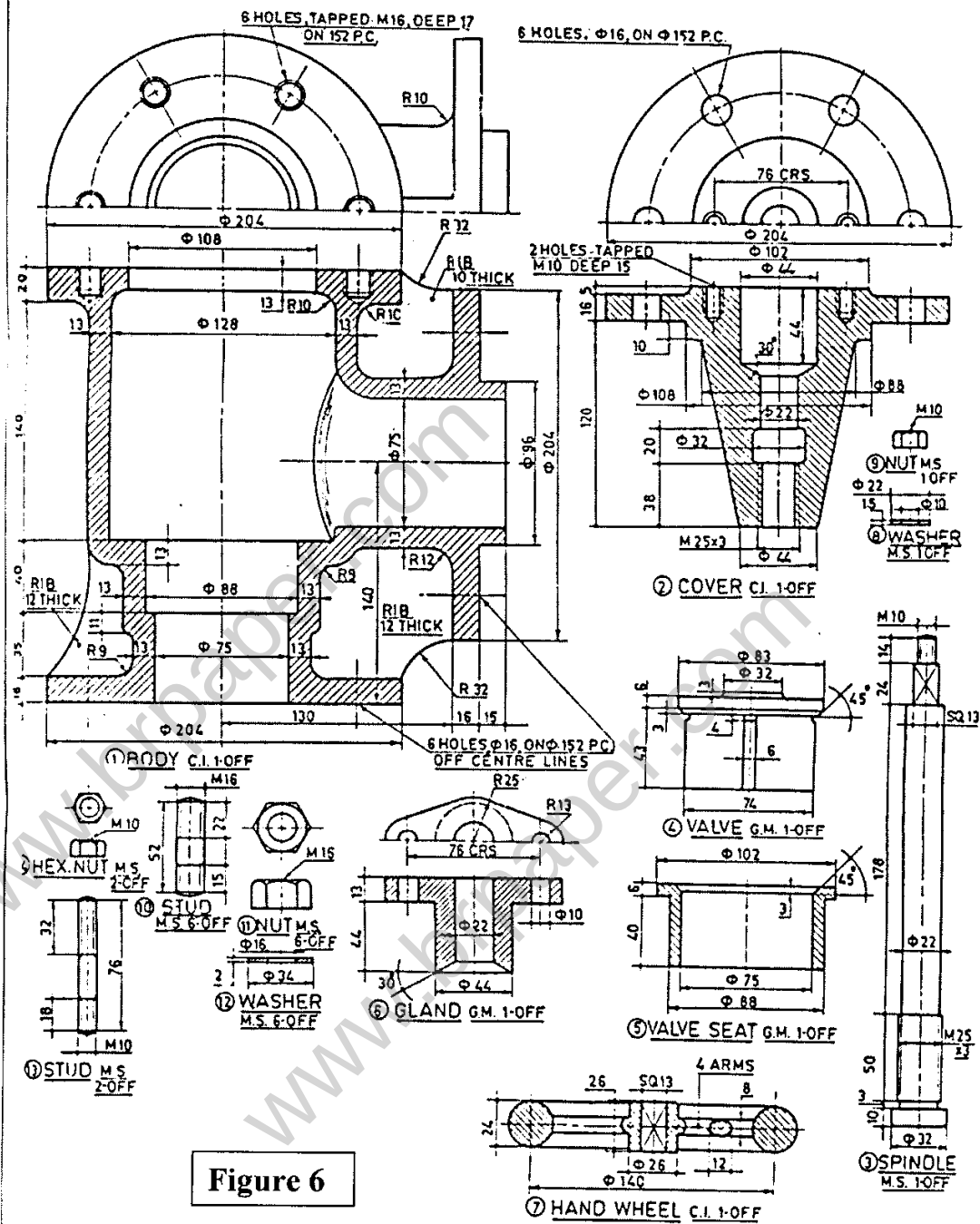


Figure 6