Roll No. | | | | | | | | | | | |

Total No. of Pages: 05
Total No. of Questions: 09

B.Tech (ME)(Sem.3RD)

MACHANICS DRAWING

Subject Code: BTME-303
Paper ID: [A1140]

Time: 3 Hrs. **Max. Marks: 60**

INSTRUCTIONS TO CANDIDATE:

1. **SECTION –A, is Compulsory consisting of ten Sub-question carrying Two marks each**
2. **Attempt any four questions from SECTION-B.**
3. **Attempt any Two questions from SECTION-C.**

SECTION–A (10x2=20)

Q.1. Write briefly

(a) What is flexible coupling? What are the advantages?

(b) What do you mean by the term 'notation dimensioning'?

(c) What is a sectional view? Why sectional views are used in drawing.

(d) Define nut? Give the important types of nut used in engineering practice?

(e) What are cotter and where are they used?

(f) Name two head forms of rivets.

(g) What is blow-off cock and where it is used?

(h) What is the advantage of providing bush in a bearing?

(i) Draw the symbol of first angle of projection?

(j) What is the function of tailstock in lathe machine?

SECTION–B (4x5=20)

Q2. Draw the front view, top view and side view of a hexagonal bolt 24 mm diameter and 96mm long with a hexagonal nut and a washer by following approximate proportions.

Q3. Draw the sectional front view and top view of a doubled riveted lap joint (Chain Type). Take the diameter of rivet=24mm.

Q4. Draw the sectional representations and appropriate symbol for the following form of weld.

(a) Fillet
(b) Stud
(c) Flash
(d) Single bevle butt
(e) Double –U butt

Q5. What are multi-start threads? Where these are used and why?

Q6. Draw free hand the sectional front view of pipe union joint?

SECTION–C (2x10=20)

Q7. Figure-1 shows the detail of lathe tail, stock draw the following view of the assembly to some suitable scale.

(a) Front view full in section
(b) Righty side end view

Q8. Figure-2 shows details of swivel bearing. Assemble the parts and draw the following views

(a) Front view –right half in section
(b) End View

Q9. Figure-3 Shows the details of connecting rod for Petrol engine. Assemble all the part and draw the following view of the connecting rod.

(a) Elevation
(b) Plan-Full in Section

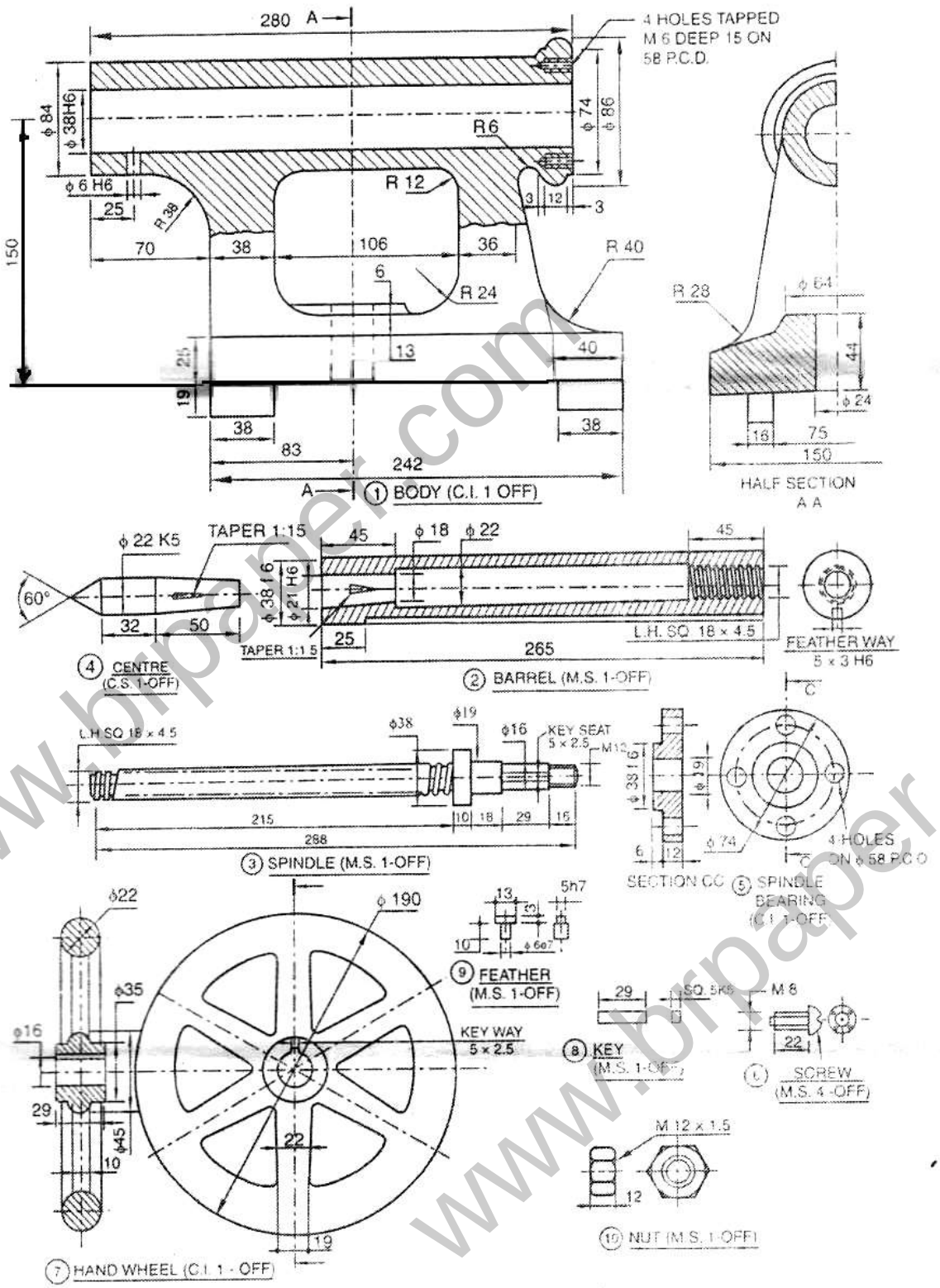

Figure 1: Details of tail stock

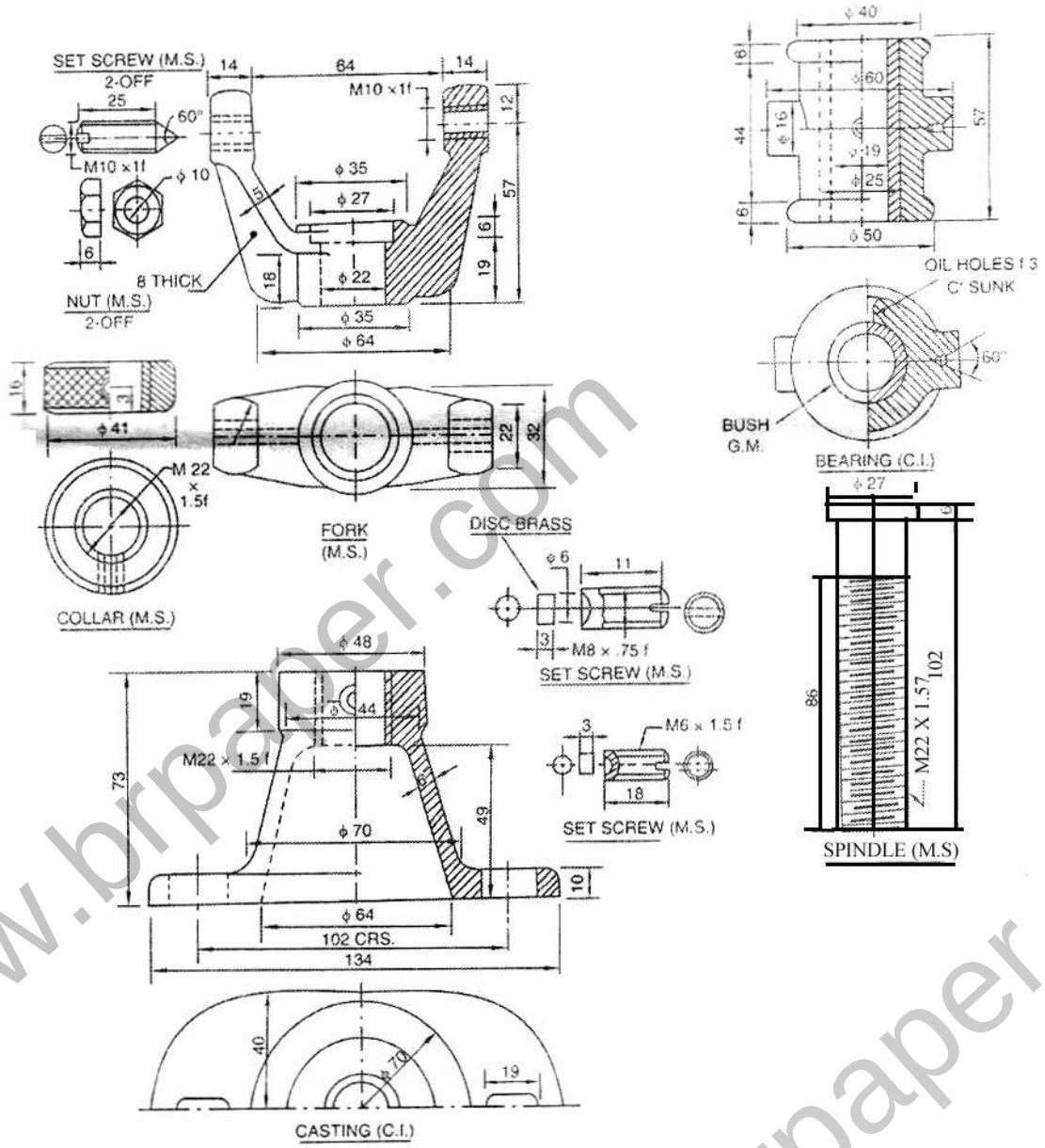

Figure 2: Details of Swivel Bearing

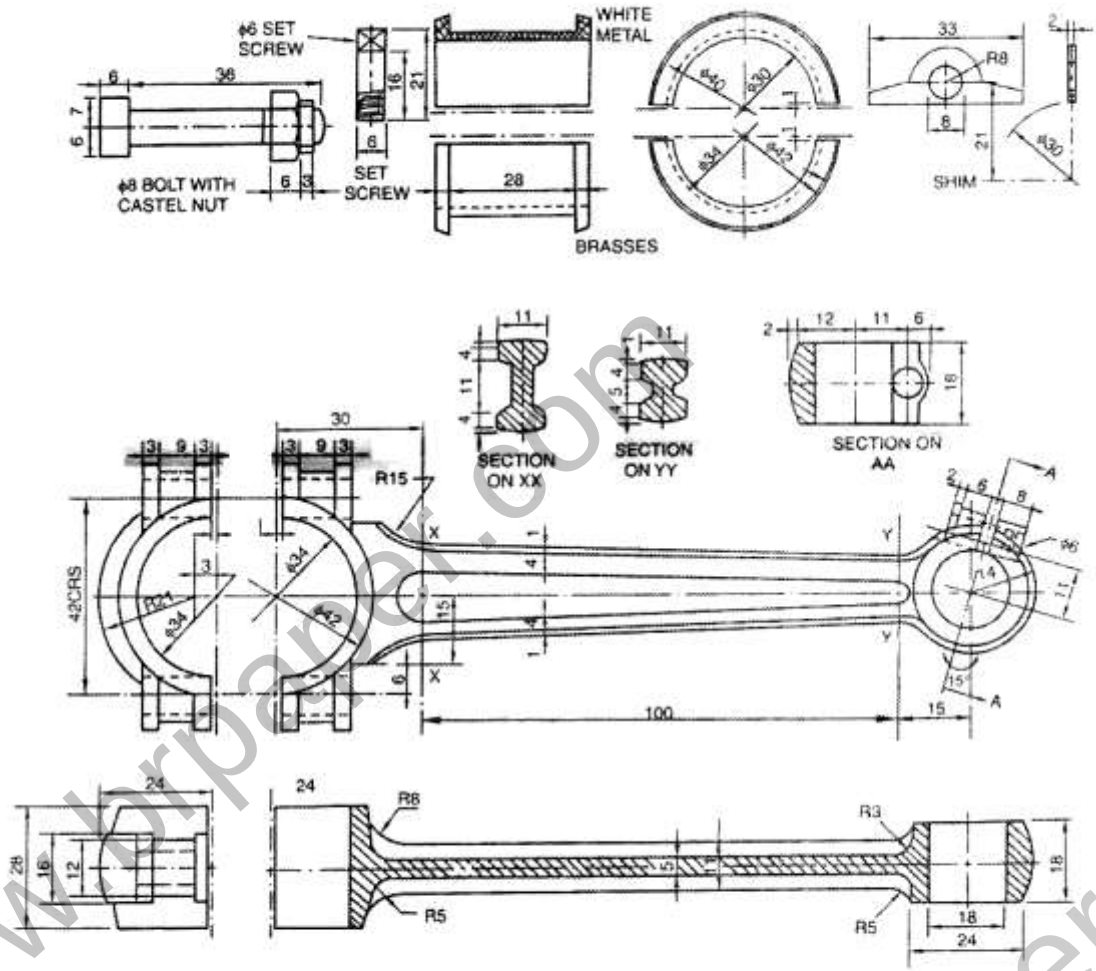

Figure 3: Details of connecting rod

-----END-----