



BOWEN UNIVERSITY, IWO, OSUN
COLLEGE OF AGRICULTURE, ENGINEERING & SCIENCES (COAES)
MECHATRONICS ENGINEERING PROGRAMME
B. ENG. ELECTRICAL/ELECTRONIC ENGINEERING
2022/2023 SECOND SEMESTER EXAMINATIONS

COURSE CODE: MCE 202

COURSE TITLE: ENGINEERING DRAWING II

COURSE UNIT: 2

TIME ALLOWED: 2 HOURS

INSTRUCTIONS: Answer question 1 and any other two.

All construction lines must be shown.

Answer each question on a separate sheet of paper.

Title block must be on every sheet

QUESTION ONE

a. Sketch five types of thread profiles and five types of rivet head (10 Marks)

b. Draw the sectional front and top view of a half-lap muff butt – muff coupling of diameter 25mm as shown in figure 1, take W the width of the key to be $0.25D + 2$ and T the height of the key to be $0.67W$. (20 Marks)

QUESTION TWO

Draw the plan and end view of a standard hexagonal headed bolt of diameter 25 mm and length 80 mm. (15 Marks)

QUESTION THREE

Draw the front and end view of the connecting rod as shown in Figure 2 (15 Marks)

QUESTION FOUR

Draw the front and end view of belt pulley as shown in Figure 3 (15 marks)

QUESTION FIVE

Draw the sectional front and top view of a butt – muff coupling of diameter 25mm as shown in figure 4, take W the width of the key to be $0.25D + 2$ and T the height of the key to be $0.67W$. (15 Marks)

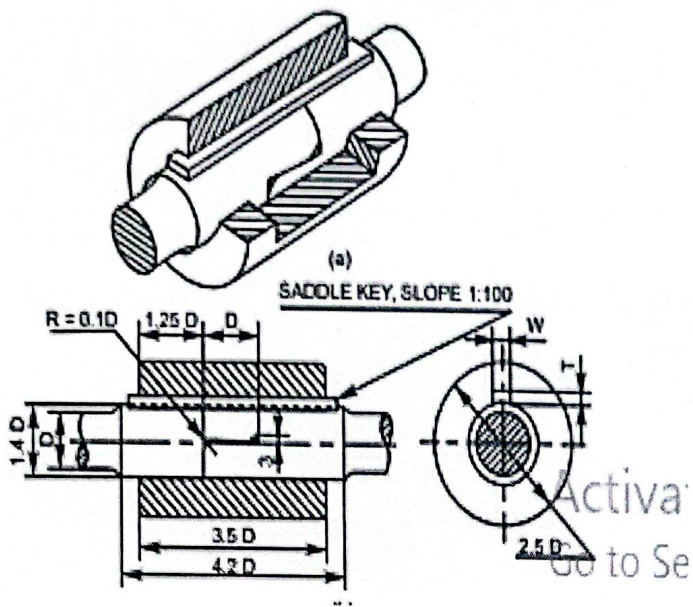


Figure 1.

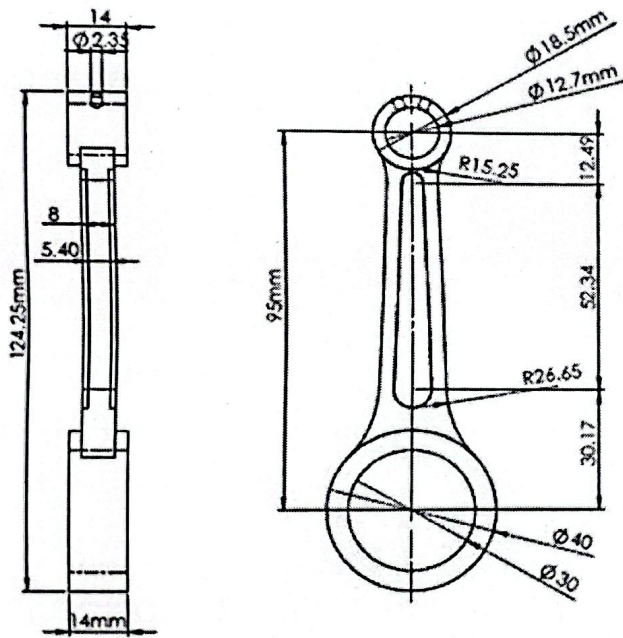


Figure 2

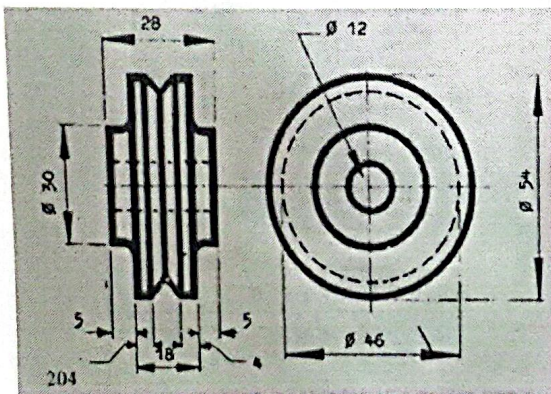


Figure 3

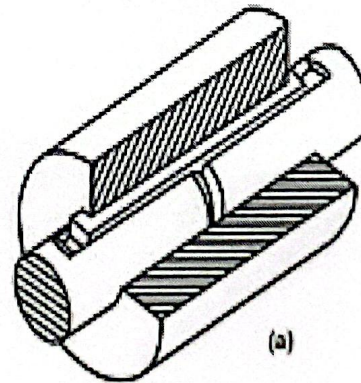


Figure 4