

SECTION B [20 MARKS]
ANSWER ONE QUESTION FROM THIS SECTION

QUESTION ONE

- [a] List and explain five Personal Protective Equipment [PPE]. [5 marks]
- [b] List five basic safety rules for hand and power tools respectively. [10 marks]
- [c] List five Good Housekeeping habits you must observe in Engineering Workshop. [5 marks]

QUESTION TWO

- [a] Explain the use of the following tools:
 - i. Bench vice; ii. Odd leg calipers; iii. Punches; iv. Vernier calipers; v. Twist drills. [5 marks]
- [b] List the types of files you know. Explain five of them. [5 marks]
- [c] List five characteristics of a good timber. [5 marks]
- [d] Explain the use of the following in Carpentry Workshop:
 - i. Smoothing plane; ii. Jack Plane; iii. Cross-cut saw; iv. Tenon saw; v. Dovetail chisel. [5 marks]

SECTION C [20 MARKS]
ANSWER ONE QUESTION FROM THIS SECTION

QUESTION ONE

- 1a. Define Rectification. [5 marks]
- 1b. Using suitable diagram illustrate the processes and stages involved in the design and construction of a regulated power supply unit using bridge rectifiers. [15 marks]

QUESTION TWO

- 2a. Distinguish between concrete and re-enforce concrete. [5 marks]
- 2b. Using suitable examples, explain the essence of re-enforcement of concrete. [15 marks]

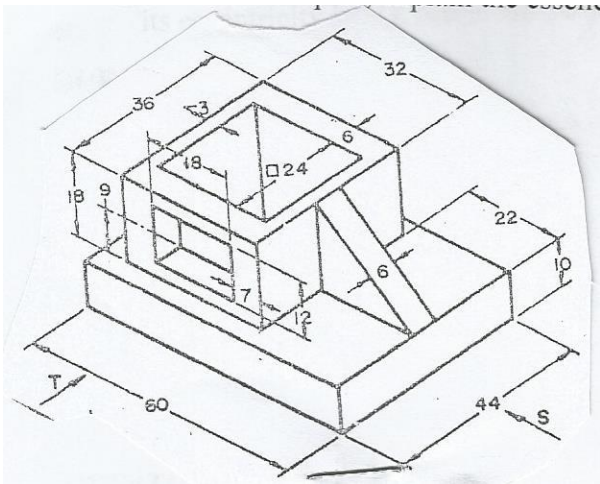


Fig. 1. Support Block

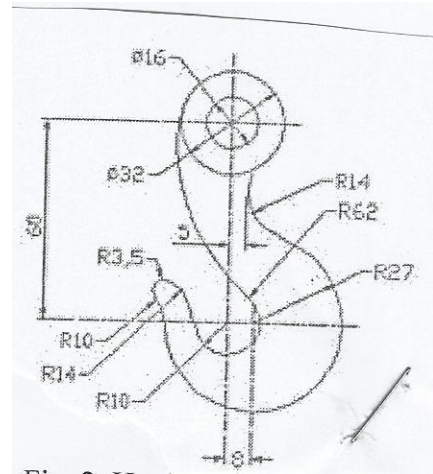


Fig. 2. Hook