

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

[AHS 0423]

APRIL 2023

Sub. Code: 2453

**BACHELOR IN PROSTHETICS & ORTHOTICS**  
**FIRST YEAR (Regulation 2017-2018 onwards)**  
**PAPER III – WORKSHOP TECHNOLOGY AND MATERIAL SCIENCE**  
*Q.P. Code: 802453*

**Time: Three Hours**

**Answer All questions**

**Maximum : 100 Marks**

**I. Elaborate on :**

**(3X10=30)**

1. Operation of Drilling Machine and its types.
2. Types of Leathers and Chrome Tanning Process.
3. Types of Wood Joints.

**II. Write Notes on :**

**(8X5=40)**

1. Types of Hand Tools.
2. Turning and Facing operation using Lathe.
3. Properties of Ferrous Metals.
4. Properties of Plaster of Paris.
5. Seasoning of wood.
6. Types of Foam used in P&O.
7. Plastic Welding process.
8. Operation of Compressor.

**III. Short Answers on :**

**(10X3=30)**

1. Different types of metals used in P&O.
2. Stress and Strain curve for metals.
3. Different types of fabrics used in P&O.
4. Properties of Fiber Reinforced Plastics.
5. Properties of Polypropylene.
6. Merits and Demerits of Plastics.
7. Name few operations done using Lathe machine.
8. Why heat treatment of metal is needed and define annealing?
9. Explain about Hook's Law.
10. Draw Knife.

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