

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

[AHS 1123]

NOVEMBER 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. Different types of hammers and its use with neat sketch.
2. Classification of plastic material and its properties.
3. Any five Special tools used in Prosthetics and Orthotics.

II. Write Notes on : **(8X5=40)**

1. Heat treatment of metals.
2. Wood and its types.
3. Leather and its properties.
4. Wood Working tools
5. Types of rivet and riveting failure.
6. Cutting tools and its usage.
7. Viscoelastic behavior of plastic.
8. Abrasive machine.

III. Short Answers on : **(10X3=30)**

1. What is Vernier caliper? Mention its use.
2. What is vacuum pump? Mention its use.
3. Write down the use of compressor in Prosthetics.
4. What is Vice? Write different types of vices.
5. Write about Jig bending stirrup.
6. Define Malleability.
7. What do you know about HDPE and its use in Prosthetics?
8. Dust Collection Equipment.
9. Differentiate between polymer and monomer.
10. What is sintering?
