

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

[AHS 0424]

APRIL 2024

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 : **(3 X 10 = 30)**

1. Explain in detail about workshop safety, hazards and care.
2. Types of Fiber reinforced plastics and properties of Carbon reinforce plastics.
3. Describe leather, types and its tanning procedures.

II. Write Notes on : **(8 X 5 = 40)**

1. Surface coating of metals.
2. Explain the types of wood and the tools used for wood works.
3. Newton's Laws of Motion.
4. Power cutting tools used in P&O.
5. Materials and Techniques used for Lamination and Moulding in P & O.
6. What is meant by ductile materials?
7. Centre of Gravity.
8. Properties of leather.

III. Short Answers on : **(10 X 3 = 30)**

1. What is the chemical formula of Plaster of Paris?
2. Uses of resins in P & O application.
3. Ferrous and Non-ferrous metals.
4. Silicon.
5. Buckling.
6. H.D.P.E.
7. Grinding machine.
8. Welding.
9. Centroid.
10. Equilibrium.
