

[LH 0815]

AUGUST 2015

Sub. Code: 2403

**BACHELOR IN PROSTHETICS & ORTHOTICS (BPO)
FIRST YEAR
PAPER III – MATERIAL AND WORKSHOP TECHNOLOGY**

Q.P. Code: 802403

Time: Three hours

Maximum : 100 Marks

Answer all Questions

I. Elaborate on:

(3 x 10 = 30)

1. Leather and its types with properties and usage.
2. Lathe machine with sketch and parts with operating principles.
3. Different types of files with diagram and usage.

II. Write notes on:

(8 x 5 = 40)

1. Surface coating of metals.
2. Types of joints formed by wood.
3. Polymer and polymerization.
4. Silicon and its properties with usage.
5. Soldering and its procedure.
6. Compressors and its working principle.
7. Sanding machine.
8. Mechanical working of metals.

III. Short answers on:

(10 x 3 = 30)

1. Why heat treatment of metal is needed and define annealing?
2. Write short note on Hack saw and its use.
3. List the composite materials used in prosthetics and its advantage.
4. Explain about the vice which is useful for orthotics work.
5. Explain about any special tool used in prosthetics.
6. Define toughness.
7. Write short note on polyester.
8. Define Lamination and its process.
9. List the metal and alloys used in orthotics.
10. What is polyurethane rigid foam and its use in prosthetics?
