Sub. Code :2403

## B.Sc. PROSTHETICS AND ORTHOTICS FIRST YEAR PAPER III – MATERIAL AND WORKSHOP TECHNOLOGY

Q.P. Code: 802403

Time: Three hours Maximum: 100 Marks

**Answer All questions** 

I. Elaborate on:  $(3 \times 10 = 30)$ 

1. Lathe Machine and its various operations.

- 2. Classification of Wood and Different types of wood joints.
- 3. Types of Fiber Reinforced Plastics and Properties of Carbon Reinforced Plastics.

II. Write notes on:  $(8 \times 5 = 40)$ 

- 1. Operation of Tensile testing machine.
- 2. Various stages involved in Case Hardening of steels.
- 3. Drilling machine and its operations.
- 4. Processing of Fiber reinforced plastic using Pultrusion method.
- 5. Explain about Polypropylene and its uses.
- 6. Environmental Hazards of using Plastics.
- 7. Operation of Drilling Machine.
- 8. Types of Vice used in P & O Workshop.

## III. Short answers on: $(10 \times 3 = 30)$

- 1. Difference between Ferrous and Non-ferrous Metals.
- 2. Different types of metals used in P & O.
- 3. Properties of Aluminum.
- 4. What is soldering?
- 5. What is the Chemical formula of plaster of Paris?
- 6. List few Wood working tools.
- 7. What is Vegetable tanning process?
- 8. Define Viscoelastic behavior of plastic.
- 9. What is the use of Power hacksaw?
- 10. What is the need of Hot air oven in P & O application?

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