

[LK 0217]

FEBRUARY 2017

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 x 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 x 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 x 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?

[LL 0817]

AUGUST 2017

Sub. Code :2403

**B.Sc. PROSTHETICS & 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 x 10 = 30)

1. Operation of Drilling Machine and its uses.
2. Properties and uses of Polypropylene.
3. Different types of cutting tools used in P & O application.

II. Write notes on: (8 x 5 = 40)

1. Operation of grinding machine.
2. Various stages involved in annealing of metals.
3. Thermosetting plastic and its P & O application.
4. Define polymer and process of polymerization.
5. Explain in detail about metal welding process.
6. Environmental Hazards of using foams.
7. Process of surface coating of metals.
8. Types of hand files used in P & O workshop.

III. Short answers on: (10 x 3 = 30)

1. Define stress and strain.
2. Difference between thermoplastic and thermosetting plastics.
3. Properties of steel.
4. What is Fiber Reinforced Plastic?
5. Uses of soft foams in P & O application.
6. List few power tools used in P & O workshop.
7. What are the uses of silicon in P & O application?
8. Uses of dust collector.
9. Uses of resins in P & O application.
10. Different types of materials used to make sockets.
