## NWFP 103: NWFP BASED INDUSTRIES (06 credit)

## **SYLLABUS**

NWFP Based industries: Micro, small, medium enterprises; Pulp and Paper Industry: history of paper making; raw material, process of paper making, pulping, bleaching etc.; types of papers; Manufacture of cellulose derived products; Cutch and Kattha industry; Bamboo based products and small scale industries; other small scale industries based on NWFPs: Pencil/ Agarbatti/ Sports good/ Spices

## **UNIT SCHEDULE**

Unit 1. Pulp and paper Industry: Introduction and raw material

Unit 2.Process of paper making I: Pulping

Unit 3. Process of paper making II: Pulp bleaching, stock preparation and sheet formation

Unit 4. Types of paper

Unit 5. Manufacture of rayon and other cellulose derived products

Unit 6.Manufacture, properties and uses of composite wood, ply-board, fiber board, particle board and hard board.

Unit 7. Production of wood molasses, alcohols and yeast

Unit 8. Cutch and Katha industry I: introduction and raw material

Unit 9. Cutch and Katha industry II: Materials and extraction process

Unit 10. Cutch and Katha industry III: Uses of Cutch and Katha

Unit 11.Small scale industries I: Bamboos and Canes

Unit 12.Small scale industries II: Pencil/ Agarbatti/ Sports good/ Spice