



पंडित दीनदयाल उपाध्याय शेखावाटी  
विश्वविद्यालय सीकर

**SYLLABUS**

**B.A. PART-III**

**EXAMINATION-2023-24**

## 14, TEXTILE CRAFT

### B.A. Part III -

SCHEME: BA/B.Com PART-III

		Duration	Max mark	Min mark
1. Theory:	Paper-I	3Hrs	30	
	Paper -II	3Hrs	30	22
2. Practical:	Paper -I	3Hrs	35	
	Paper-II	3Hrs	35	25
3. Submission:	Paper -I		35	
	Paper-II		35	25

### Paper-I : Weaving Theory II

#### UNIT-I

- Types of Spinning: Mechanical and Chemical  
Mechanical spinning process: picking, ginning, combing/carding, drawing etc. Types of chemical spinning-melt spinning, dry spinning and wet spinning.
- Types of Yarns: Simple and Fancy  
Simple yarn: single and double/plied/folded yarn
- Calculation of resultant count for folded yarn

#### UNIT-II

- Manmade and Synthetic fibres  
Man-made fibres: Basic methods of producing rayon fibre, Different types of man-made fibres  
Synthetic fibres: Different types of synthetic/chemical fibre, method of their production, properties of polyester fibre, nylon fibre, glass fibre.
- Silk and Wool  
Production, spinning, properties and uses of silk, different types of silk  
Classification of wool, wool spinning process, difference between woollen and worsted fabric
- Concept of Mixing and Blending, Basic difference between mixing and blending.  
Concept of Staple and Filament fibre; difference between staple fibre and filament fibre

#### UNIT-III

- Derivatives of Twill weave: Broken weave, Herringbone weave and Diamond weave
- Towel weaves: Huckaback and Honeycomb; quality of yarn and weave selected for towels
- Concept of shedding mechanism; Dobby and Jacquard shedding mechanism

## Paper-II: Dyeing Theory II

### UNIT-I

1. Dye molecule; Concept and Importance of Chromophores and Auxochrome in a dye
2. Objectives of Fabric finishes; different mechanical and chemical fabric finishes; Determinants of finishes
3. Different types of natural and synthetic dyes.

### UNIT-II

4. Method of direct printing: Screen printing; colour preparation and screen preparation
5. Discharge and Resist printing; different styles of discharge and resist printing
6. Factors affecting colour fastness: composition of fibre, chemical structure of dye, techniques of dyeing/printing, addition of other useful additives

### UNIT-III

7. Importance of fabric finishes
8. Different types of chemical finishes- crease resistant finish, water proof finish, fire proof finish, moth proofing finish and absorbency finish.
9. Determinants of fabric finishes.

### Practical (Paper-I)

1. Concept of yarn twist(S twist and Z twist) and plied yarn(single and double yarn)
2. Calculation of Ends and Picks per inch in given piece of fabric
3. Towel weaves preparation using paper strips

### Practical (Paper-II)

1. Screen preparation (simple tracing method)
2. Table cover preparation by screen printing

### Submission (paper-I)

1. Assessment of yarn and fabric samples
2. Assessment of weave samples

### Submission (paper-II)

1. Assessment of samples
2. Any one article using screen printing

### Practical Examination Scheme:

Major Problem: 20 Marks      Minor Problem: 15 Marks

### Reference books:

Booth, J.E. (1996) Principles of Textile Testing, 1<sup>st</sup> edition, CBS publishers & distributors PVT.Ltd. New delhi

Sahnai, V.A. (1980) Technology of Dyeing, Sevak publications. Mumbai

Sahnai, V.A. (1979) Technology of printing, Sevak publications. Mumbai

Sahnai, V.A. (1999) Technology of finishing, Sevak publications. Mumbai