

# **RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER**

## **SYLLABUS FOR COMPETITIVE EXAMINATION FOR THE POST OF ASSISTANT PROFESSOR IN TEXTILE– DYEING AND PRINTING FOR COLLEGE EDUCATION DEPARTMENT**

### **PAPER -I**

#### **Unit: 1-**

- Production, processing, composition and properties of textile fibers.
- Impurities in raw cotton, wool, silk and bast fiber.
- Elementary knowledge of textile auxiliaries.
- Objects of different processes involved, e.g. singeing, desizing, scouring, bleaching and mercerization.
- Introductory knowledge of machinery used in pre-treatments of cotton fabric.

#### **Unit: 2-**

- Definition and classification of dyes and dyeing.
- Application of Pigments, Direct, Reactive, Vat, Sulphur and Azoic dyes on cellulosic fiber and Classification of acid dyes, its application on wool and silk fiber.
- Selection of dyes for synthetic fiber and application on Nylon, Polyester and Acrylic fibers.

#### **Unit: 3-**

- Methods of yarn construction, Yarn numbering system- Count, Denier, Tex.
- Types of yarn, Yarn twist, Yarn defect.
- Components and characteristics of woven fabrics.
- Mechanism of weaving- Parts of loom, Yarn preparation for weaving, Basic Weaving operation.
- Types of looms- Handloom, Power loom, Shuttle loom, Shuttle less loom.

#### **Unit: 4-**

- Dyeing machineries for fibre, yarn and fabric.
- Measurement of fastness properties e.g. washing, rubbing, light and perspiration.

#### **Unit: 5-**

- Definition of finishing and classification of various types of finishes.
- Finishing of cotton, Wool, Silk and Manmade Fibers.
- Important finishing treatments like Calendaring, Organdie, Sanforization, water repellency and anticrease finishes.

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#### **Note :- Pattern of Question Paper**

- 1. Objective type paper**
- 2. Maximum Marks : 75**
- 3. Number of Questions : 150**
- 4. Duration of Paper : Three Hours**
- 5. All questions carry equal marks.**
- 6. Medium of Competitive Exam : Bilingual in English & Hindi**
- 7. There will be Negative Marking.**