

RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER

Syllabus for Screening Test for the post of Lecturer - Textile Designing Technical Education Department

Part-I Introduction to Textiles:

- (i) **Fibre:**
 - (a) Definition, Classification & Identification of Textile fibers.
 - (b) Properties of various textile fibers.
 - (c) Uses of different textile fibers in textiles & other than textiles.
- (ii) **Yarn:**
 - (a) Processing of fibers into yarn.
 - (b) Types & Characteristics of different yarns.
 - (c) Count measuring systems.
- (iii) **Finishing Techniques:**
 - (a) Need for fabric finishing
 - (b) Classification & application of important finishing techniques.
- (iv) **Miscellaneous:**
 - (a) Co-relation of fiber, yarn & fabric properties.
 - (b) Selection, suitability & care of textiles.
 - (c) General importance of textiles.

Part- II Dyeing & Printing:

1. Meaning & classification of dyes.
2. General theory of dyeing & importance of auxiliaries in dyeing & printing.
3. Pretreatments for dyeing & printing.
4. Detail study of different type of dyes & pigments & application on various single & blended fabrics.
5. Preparation of printing paste.
6. Detail study of different methods & styles of printing.
7. After treatments for dyed & printed fabrics.
8. Colour fastness testing.
9. Elementary knowledge of related basic machines & equipments used for pretreatments, dyeing, printing & after treatments.

Part- III Woven & knitted fabric designing:

- (i) **Woven Fabric:**
 - (a) Introduction of fabric structures & definition of different type of fabrics.
 - (b) Brief study of Handlooms, Semiautomatic & Automatic looms including various shedding techniques.
 - (c) Classification & study of basic weaves, its derivatives & extensions.
 - (d) Application of Draft, Peg Plan & Dent Plan.
 - (e) Ornamentation of plain fabric & simple colour & weave effects.
 - (f) Fancy twills & other decorative weaves.
 - (g) Special Rib & Cord structures.

- (h) Stripe & check weave combinations.
- (i) Extra thread figuring .
- (j) Pile structures.
- (k) Various figuring structures produced by dobby & Jacquard.
- (l) Fabric analysis & cloth calculations.
- (m) Inspection of fabric for various faults & remedies.

(ii) **Knitted Fabric:**

- (a) History, definition & types of knitting.
- (b) Study of primary knitted structures.
- (c) Study of Jacquard knitted structures.
- (d) Uses of knit fabrics.
- (e) Defects in knitted fabrics & their remedies.

Part- IV Basic Drawing & Creative Textile Designing:

- (i) Elements & Principles of Drawing & Composition.
- (ii) Introduction to Art Material & Tools.
- (iii) Understanding of basic shapes & space organization.
- (iv) Detail study of colour theories & colour schemes.
- (v) colour modifications, effects & importance of colour in textiles.
- (vi) Application of texture collage & illusion in designing.
- (vii) Understanding of various styles of design.
- (viii) Understanding of different bases & placements for designing.
- (ix) Expression of terms used in Textile Design & their application.
- (x) Repeat setting & production of design on fabric through various methods.
- (xi) Factors influencing creation in designing.

Part- V Indian Traditional Textiles & World Textiles:

- (A) (i) Detail study of Indian traditional Textiles in context of following:-
 - (a) Woven – Brocade, Jamdani, Chanderi, Carpet, Baluchar.
 - (b) Painted – Kalamkari, Madhubani, Miniature, Phar, Varli.
 - (c) Dyed & printed – Ikat, Bandhani, Sanganeri, Batik, Ajarkh.
 - (d) Embroidered – Phulkari, Kashmiri, Kantha, Chickenkari, Kutch.
- (ii) Statewise classification of different traditional textiles in India.
- (B) (i) Study of motifs, colour, fabric & method of application in textiles of following countries:-
 - (a) Japan
 - (b) China
 - (c) Egypt
 - (d) U.K.
 - (e) France
 - (f) Russia
- (ii) Identification of harmful dyes & chemicals restricted/ banned by developed countries & their replacements.
- (iii) List of various textile units & Export Houses established in Rajasthan & rest of India.

- (iv) Comparative study of textile Import & Export among various countries in context of Rajasthan.
- (v) Impact of design & colour concept on export market.
- (C)
 - (i) Fashion trends & forecasting methods.
 - (ii) Influence of fashion on market.
 - (iii) Fashion merchandising.
 - (iv) List of fashion trade fairs & fashion shows organized in India.

Part- VI: Modern Textile Trends & Techniques:

(i) **Computer Aided Designing:**

- (a) Basic knowledge of computer application.
- (b) Knowledge of latest Textile Designing Softwares, their manufacturers & their application.
- (c) Colour separation & creation.
- (d) Scanning & printing techniques.

(ii) **Other modern developments for design creation :**

- (a) Latest developments in dyeing techniques.
- (b) Latest developments in printing techniques.
- (c) Latest developments in Woven, Non-woven and knitting techniques.

Pattern of Question Paper

1. Objective type paper
2. Maximum marks- 100
3. Number of questions 100
4. Duration of paper - 2 hours
5. All question carry equal marks
6. There will be negative marking