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.
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 dobbie & 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