TEXTILE DYEING AND PRINTING

B.A/B.Sc. / B.Com. Part -III -2014

Scheme Min pass Marks
Theory 54/47 Theory: 150/130

Paper- 1 (3pd/week) 3 hrs. Duration 75-Sc./65-(Arts/Commerce)

Paper- 2 (3pd/week) 3 hrs duration 75-Sc./65-(Arts/Commerce)

Practical: 27/26 Practical: 75/70

Paper -I Finishing Auxiliaries Entrepreneurship Development

Duration: 3 Hrs. Max. Marks 75-Sc./65-(Arts/Commerce)

Note: The question paper will contain three sections as under-

Section-A: one compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part.

10 (Sc.)/05 (Arts/Comm.)

Section-B: 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words.

35 (Sc.)/35 (Arts/Comm.)

Section-C: 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type answer in about 500 words, 2 questions to be attempted. 30 (Sc.)/25 (Arts/Comm.)

- Unit -1 a. Ingredients used in finishing filling materials, adhesives, antiseptics, Optical brightening agents, oils, fat and waxes, softeners.
 - b. Properties and chemistry of soaps and detergents
- Unit 2 a. Starches wheat starch, rice starch, Potato starch, Tapioca starch, Soluble starches Properties and use
 - b. Use and importance of resins (natural and synthetic)
- Unit -3 (a) water and water pollution
 - (b) Effluent treatment in Cotton Industry (Primary, secondary and tertiary level)
- Unit 4 1) Entrepreneurship Concept/Meaning, Need ,qualities of an entrepreneur Entrepreneurial Support System
 District Industry Centres (DICs)

Commercial Banks

State Financial Corporations

- Unit 5 Small scale industry: Definition; Characteristics; Need and rationale: Objectives: Scope; role of SSI in Economic Development.
 Advantages of SSI. Steps to start in SSI. Impact of Liberalization, Privatization, Globalization on S.S.I.
 - How to start a small scale industry
 - Procedures for registration of small scale industry
 - List of items reserved for exclusive manufacture in small scale industry
 - Assessment of demand and supply in potential areas of growth
 - Understanding business opportunity
 - Considerations in product selection
 - Data collection for setting up small ventures

REFERENCE BOOKS:

1. Textile Auxiliaries and Finishing Chemicals- ATIRA Publications.

- 2. Modern techniques of textile Bleaching- Dyeing, and Finishing, SITRA Pub.
- 3. Chemical Processing of Cotton, Polyester Cotton Blends-J.R.Modi and A.R.Grade- 1980, TAI Publications.
- 4. Dyeing of Polyester Blends- M L Gulrajani, 1980, TAI Publications.
- 5. Technology of Textile Processing -Vo.II, Chemistry of Dyes and Principles of Dyeing, V.A. Shenai, 1993, Sevak Publications.
- 6. Philip Kotler Marketing Management
- 7. J. C. Gandhi Marketing Management
- 8. Ramaswamy and control-Marketing Management: Planning, Implementation.
- 9. एस० सी० जैन विपणन प्रबन्ध
- 10. आर० पी० माहेश्वरी व्यावसायिक सन्नियम

PAPER- II (Finishes and new developments)

Duration: 3 Hrs. Max. Marks 75-Sc./65-(Arts/Commerce)

Note: The question paper will contain three sections as under-

- Section-A: one compulsory question with 10 parts, having 2 parts from each unit, short answer in 20 words for each part.

 10 (Sc.)/05 (Arts/Comm.)
- **Section-B:** 10 questions, 2 questions from each unit, 5 questions to be attempted, taking one from each unit, answer approximately in 250 words.

 35 (Sc.)/35 (Arts/Comm.)
- Section-C: 04 questions (question may have sub division) covering all units but not more than one question from each unit, descriptive type answer in about 500 words, 2 questions to be attempted. 30 (Sc.)/25 (Arts/Comm.)
- Unit -1 a. Objectives and functions of finishing and Classification of finishes Physical and chemical, Temporary and permanent
 - b. Preparation of finishing mixture, detailed study of Waterproofing, water repellency, proofing and moth proofing, stiffening, Crease resistance and crease proofing.
- Unit -2 a. Finishing machineries
 - a. Padding Magles 2 bowl mangle 3 bowl mangle, Washing Mangle.
 - b. Calendaring Objects, 5 bowl calendar, 7 bowl calendar, embossing calendar Schriener calendar, Swizzing calendar, Chasing calendar.
 - c. Sanforization principle, objectives and process.
 - d. Texturization
- Unit -3 1) Ecological aspects of fabrics, dyes, chemicals & packaging.
 - 2) Indian and International textile Eco Labels, standards, quality control, strategy, information systems.
 - 3) Eco or green design, issues for consumers, retailers & fashion
 - 4) Concept of recycling materials & their visual aspects
- Unit- 4 New developments in textile
 - a) Geo textile
 - b) Medical textiles
 - c) Protective Clothing
 - d) Automotive Textile
- Unit- 5 a) Fundamentals of Computer and application of CATD (computer aided textile designing)

- Overview of the computer System (Basic components & their functions)
- Overview of Windows
- Overview of Word Processors (MS-Word)
- Overview of Spreadsheet (MS-Excel)
- Overview of Presentation (MS-Power Point)
- Network Basic & Internet
- Scope & importance of CATD.

Reference Books:

- 1. Dyeing and Chemical Technology- of textile Fibres, E.R.Trotman,
- 2. Technology of Textile Processing- Vo. III, V A Shenai, 1975, Sevak Publications.
- 3. Technology of Bleaching and Dyeing of textile fibres-Chakrawarthy, 1972, Coxtown publications.
- 4. Textile Chemistry- Vo.I&II, R H Peters, Elsewhere Publishing Co., New York
- 5. S.V.S Rana, Environmental studies, Rastogi pub., Meerut, 1st ed:, 2004.
- 6. Fundamentals of Computers Graphics & Multimedia, Mukherjee, PHI

Practical

Max. marks: 75 (science)/ 70 (arts/commerce) Min.marks: 27(science) /26 (arts/commerce)

Duration: Four-Hrs. (Two Hrs.Per day)

- 1. Power point Presentation
- 2. Photo editing & capturing
- 3. CATD presentation
- 4. Evaluation of textile finishes and auxillaries (blues, dyes, stiffening and wetting agent)
- 5. Water analysis
- 6. Quality control analysis(shrinkage test, colour fastness, dimensional stability)
- 7. Field and industrial visit