

TEXTILE DYEING AND PRINTING

B.A/ B.Sc. /B.Com. Part –III -2020-21

Scheme		Min pass Marks	Max 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, Guar gum, 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. एस0 सी0 जैन – विपणन प्रबन्ध
10. आर0 पी0 माहेश्वरी – व्यावसायिक सन्नियम
11. Development of an innovative product.
12. 10. Entrepreneurship activity
13. 11. Community engagement activity

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, Fire 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

- 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
8. Development of an innovative product.
9. Entereprenurship activity
10. Community engagement activity