

Government of Jammu and Kashmir, Services Selection Board, Panama Chowk, Rail Head Jammu. (www.jkssb.nic.in)

> Marks:- 150 Time:- 02:30

## Syllabus for Written test (Objective Type) for the post of Leather Technician, Incharge Work Cum Production Centre, Quality Control Inspector and Finishing Master.

### Wood Structure, identification, forest farming

Plant physiology, physical features of different types of wood, natural defects in wood, wood structure, wood chemistry:

Chemical constituents of wood, wood destroying insects, termities and their control, wood destroying fungi, types o wood,

Wood physics.

Density, specific gravity, porosity, fibre saturation point, capillary movement, calorific value, Nursery raising, morphology or bark, stem, leaf, flower, root.

Seasoning & Preservation of wood

Seasoning definition, necessity, seasoning defects, seasoning kilns, types of preservatives, natural durability of timber, fire protection preservatives.

Timber mechanics & Engineering

Physical and mechanical properties of wood, stress, strain hooks law, timber grading, prefabrication techniques, timber joints and mechanical fasteners, prevention of termite attack in buildings by constructional methods.

Wood composites & adhesives

Wood adhesives, types and classification, manufacturing process of plywood, particle board, bamboo mat board.

Wood working & finishing

Various wood working & finishing operations, carving tools and properties, portable power tools, wood working joints, powder coating, paints, oils, varnishes, logging tools.

Product design & fabrication

# 30 Marks

### 20 Marks

10 Marks

10 Marks

20 Marks

10 Marks

Repair & maintenance of wood working machines

Types of maintenance, total predictive maintenance, lubrication, concept of tribology, properties of specific lubricants, use of lubrication equipment like oil gun, grease gun.

Concept of design, role of color, figure, texture, grain direction, time

Standardization Quality control, costing accounting 10 Marks

Statistical methods, Masures of central tendency (mean, mode, median), Instrumentation (vernier caliper, micrometer, radius gauge, Dail Indicator) Depreciation, cost estimation, journal, cash book.

### Generic Skills & entrepreneurship Development

Task management (initiation, planning, execution), knowledge in problem solving Entrepeneurship (meaning and its needs), Entrepreneurship support system (district industries, NABARD, state financial corporation.

### Basics of Engineering

Voltage, current, power & energy with their units. Difference between AC & DC, types of pumps & their applications, belt drive, gear drive

Pollution Control and Waste management

Ecosystem, energy flow in an ecosystem, water pollution, conservation of natural living resources, solid waste management, environmental education and awareness.

> (S. A. Raina)KAS, Secretary, J&K Services Selection Board, Jammu.

## 10 Marks

10 Marks

10 Marks

10 Marks