

Detailed Syllabus for the Post of Jr.Instructor (Wood Work Technician) in Industrial Training Department - Cat No: 674/2023

SI No	Module	Topics	Marks
1	Introduction of wood work technician trade	Introduction of wood work technician Trade, General discipline, workshop discipline and Housekeeping, Safety precaution in the workshop and industrial safety, Importance of P.P.E, Types of PPE and their application, Types of fire and fire extinguisher, First Aid.	5
2	Timber	Introduction of timber, growth of trees, cross-section of exogenous tree trunk, types of tree, different part of a tree, Soft and hard wood, their differences. Common Indian timbers, Defects in timber, diseases of timber, knots, shakes, grains etc. Seasoning of timber definition, advantage and disadvantage of seasoning, Moisture content in timber and its effect on timber, Characteristics of wood, physical and mechanical properties of wood, Quality of good timber, Preservation of timber, Timbers used in furniture work, Properties and characteristics of different furniture wood. Conversion and types of conversion of wood,	10
3	Hand tools	Marking and testing tools, Holding and supporting tools, Measuring tools, Cutting tools, Planing tools, Boring tools, Striking tools, Driving tools, Miscellaneous tools, Abrasion tools	20
4	Wooden joints	Framing joint, angle joint, housing joint, dovetail joint, Broadening joint, Lengthening joint	5

5	Simple furniture making	Types of glue and their uses, adhesives advantages, use and their types, Veneer, plywood, block board, laminated board, hard board, insulation board, mica etc, Calculation of timber required for stool, Design of wooden wall unit uses in bed room, dining hall, library, office, workshop, classroom, Uses of joint for small table to stronger strength, Manufacturing process of various boards and sheets, Types of hinges, Uses of hinges, Types of door lock & their different uses, Nail and screws, Nut, bolts and washer, Lock hinges hasp and staple, Knowledge of other fittings	15
6	wood carving	Description of different carving tools, Tools required for ornamental carving, Properties of wood, Preparation a bill of materials, Estimate the material.	5
7	Wood Finishing	Paints, ingredients of paints, Name of the agent of paints, Method of preparation of surface for staining, Necessary tools and equipment required for staining, Uses of different grade sandpaper, Preparation of putty and use, Staining - type, process, methods applied for different timber., Description & method of French polish, Method of wax polish and its uses, Methods of old furniture re polish, Estimation process of wooden furniture.	5
8	Wood working machines	band saw machine, circular saw machine, planing machine, Pedestal grinding machine, Pedestal drilling machine, Wood turning lathe, Mortise machine, Sanding machine, All types of portable machineries.	15

9	Modular Kitchen & Modular Furniture	Introduction of Modular Kitchen and Modular Furniture, Different hand tool including machineries, Different allocation, Different Material and its characteristics, application, Assemble Procedure, Application of hardware, Different types of timber used, Types of Job dressing, Application of Sunmica in different Colour contrast.	5
10	Building construction.	Different type door and windows, roof trusses, Description of aluminium, Anodising of the aluminium windows, channel, section Etc, Knowledge of different aluminium section, channels required for manufacturing the windows, Knowledge of fibre glass, Introduce about rubber padding /gasket and aluminium wheel, Uses of P.V.C as substitute of wood, Give more get-up and cheapest in price, New style framing work, Modern technologies follow up P.V.C moulding, Advantages and disadvantages, Purpose of using floor construction with different types of joist, Basic principal of repairing work, door window, staircase rack etc.	15

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.