

MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI-51

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|---------|--|--|---------|------------|-----------------|-------------|-------|------------|-------------|---|-----------|-------------------------------------|-------|--------|-----|-------|---|----------|---------------------------|--------|--------|-----|----|---|----------|------------------------|--------|--------|-----|-----|--|--|-------|--|--|-----|-----|
| 1 | Name of Syllabus | C.C.IN WOODEN DOOR & WINDOW SHUTTER MAKER (303112) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Max. No's of Student | 25 Students | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Duration | 6 Month | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Type | Part Time | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | No's Of Days / Week | 6 Days | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | No's Of Hours /Days | 4 hrs. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Space Required | 1) Workshop = 300 sq feet 2) Class Room = 200 sq feet TOTAL = 500 sq feet | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Entry Qualification | 7 th Pass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Objective Of Syllabus/ introduction | Introduction – the syllabus of window door & window shutter making has been evolved in such a way that after completion of course of 6 months, the student would acquire good working skill in window door & shutter making . He would also gain confidence to operate machines such as circular saw , wood turning lathe , planning machine . Objective:- 1) Develop proper knowledge of door & window making . 2) Develop skill in various types of wood joints. 3) Develop confidence and entrepreneurship by arrangement industrial visit and lectures of personnel from industries . | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Employment Opportunity | The Student may start his own business / May get employment in furniture making company/shop | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Teacher's Qualification | ITI / NCVT In Carpentry with 2 year experience | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Training System | Training System Per Week <table><tr><td colspan="2">Theory</td><td colspan="2">Practical</td><td colspan="3">Total</td></tr><tr><td colspan="2">6 hrs</td><td colspan="2">18 hrs</td><td colspan="3">24 hrs</td></tr></table> | | | | | | | Theory | | Practical | | Total | | | 6 hrs | | 18 hrs | | 24 hrs | | | | | | | | | | | | | | | | | |
| Theory | | Practical | | Total | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 hrs | | 18 hrs | | 24 hrs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Exam. System | <table><tr><td>Sr. No.</td><td>Paper Code</td><td>Name of Subject</td><td>TH/PR</td><td>Hours</td><td>Max. Marks</td><td>Mini. Marks</td></tr><tr><td>1</td><td>30311211</td><td>Wooden door & window shutter making</td><td>TH -I</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>2</td><td>30311221</td><td>Basic Carpentry Operation</td><td>PR -I</td><td>3 hrs.</td><td>100</td><td>50</td></tr><tr><td>3</td><td>30311222</td><td>Door and window making</td><td>PR -II</td><td>6 hrs.</td><td>200</td><td>100</td></tr><tr><td></td><td></td><td>TOTAL</td><td></td><td></td><td>400</td><td>185</td></tr></table> | Sr. No. | Paper Code | Name of Subject | TH/PR | Hours | Max. Marks | Mini. Marks | 1 | 30311211 | Wooden door & window shutter making | TH -I | 3 hrs. | 100 | 35 | 2 | 30311221 | Basic Carpentry Operation | PR -I | 3 hrs. | 100 | 50 | 3 | 30311222 | Door and window making | PR -II | 6 hrs. | 200 | 100 | | | TOTAL | | | 400 | 185 |
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THEORY PAPER - I - WOODEN DOOR AND WINDOW SHUTTER MAKING

| Sr No | Topics Name |
|-------|---|
| 1 | Introduction to the institute and in particular to the Wooden door & window shutter making Trade safety precautions Observed by the trainees |
| 2 | Sketches Of Geometrical Figure, Joints etc |
| 3 | Notes on common hand tools and making tools. |
| 4 | Care and maintenance of hand tools including tempering |
| 5 | Timber varieties, & their properties defects & diseases preservation. Notes on available forms of timber in market & identification and their uses. |
| 6 | Seasoning and preservation. Notes on available forms of timber in market and identification and their uses. |
| 7 | Remedies for defective timber |
| 9 | Joinery Work_common in joinery work & properties and uses of different joints uses in furniture and cabinet making. |
| 8 | Special joints for paneling etc. |
| 9 | uses and applications, Application, methods and uses of Tongue and glove, dowels and special tools required for such jobs. |
| 10 | Artificial and prepared materials used in carpentry, their varieties properties, uses, and application in different jobs. |
| 11 | Notes on functions and fixing accessories like, hinges, castors, slides, handles, fasteners, locks, latches etc., |
| 12 | Properties, uses and applications of adhesives (notes on) notes on surface finishing its properties, uses and applications. Notes on surface finishing materials, uses, properties and applications. Notes on metallic fixing and fastening materials their uses, application and identification in market-screws, nails, pegs, nut-bolts, etc., |
| 13 | Notes on varieties of power, operated hand tools for various jobtheir operation, care and maintenance |
| 14 | Notes on wood working machines with uses, care and maintenance. |
| 15 | Notes on, glaziers work, shutters, flaps, lids, lockers, doors & fittings. |
| 16 | Notes on making jigs, templates, saddles etc., use and application of the same. |
| 17 | Notes on construction & corrections of furniture etc., for both wooden and laminated articles. |
| 18 | Notes on repairs of articles in common use. |
| 19 | Estimating cost of material required for jobs. |
| 20 | Estimation of repair jobs, (material requirements). |

PRACTICAL - I BASIC CARPENTARY OPERATION

| Sr No | Topics Name |
|--------------|--|
| 1 | Use of different measuring and marking tools for the wooden door and window shutter making. |
| 2 | Sharpe ring of tools like firmer chisel, mortise chisel, planer blades etc. and Drilling holes, including continuous chain drilling. |
| 3 | Simple operations like cutting with saw in different manners and ripping. |
| 4 | Planning practice and making planks to size and level Application of marking and mortise gauges. |
| 5 | Marking for tennoning by using mortise gauge. Try square and other marking materials. |
| 6 | Marking for mortise perpendicular to each member. |
| 7 | Marking joints in angular positions. Use of carpenter vice. |
| 8 | Preparing tongue and glove dowe fixing of panels and boards b packet brewing. |
| 9 | Various Type of Joints |
| 10 | Job exercises, involving simple joints, by using timber and formed materials. |

PRACTICAL - II DOOR AND WINDOW MAKING

| | |
|-----------|---|
| 11 | Surface finishing. |
| 12 | Operate power hand tools such as disc/band sander, tongue and groove, saw, drilling, etc., |
| 13 | Operate simple wood working machines to prepare simple jobs. |
| 14 | Marking for jobs involving cutting at curvatures, profile marking and shaping jobs to size and position by using different files. |
| 15 | Making of jobs like Wooden door etc. |
| 16 | Making of jobs like Wooden door etc. |

LIST OF TOOLS AND EQUIPMENT.

| | | | |
|-----|---|-----|---------|
| 1. | Riles two fold steel | 24" | 4 Nos. |
| 2. | Caliper inside | 6" | 1 No. |
| 3. | Caliper outside | 6" | 4 Nos. |
| 4. | Marking knife | | 3 Nos. |
| 5. | Screw driver (Hat bhide) | 12 | 4 Nos. |
| 6. | Square, try | 8" | 4 Nos. |
| 7. | Saw hand | 18" | 8 Nos. |
| 8. | Saw, tenon | 12" | 8 Nos. |
| 9. | Chisels firmer 1/8" <u>to 1"</u> By 1/8" set of 8 | | |
| 10. | Mallet 1 Kg. with handle | 1 | 06 Nos. |
| 11. | Hammer Gross pwin Carpenter 1/2 lbs. with handle. | | 4 |
| 12. | Plane Jack 14" Iron Stock 2" cutter. | | 8 |
| 13. | Plane smoothing Iron 1¾ " outer | | 8 |
| 14. | Plane jack wooden stock 2" cutter | | 4" |
| 15. | File 3 corner or triangular 2 nd out 5" | | 15" |
| 16. | Chisel mortice 1/8" to 3/4" by 1/4" set of 6 | | 4 sets |
| 17. | Gauge, Mortice 1/8" and marking | | 8+8 |
| 18. | Stone oil 8"x2"x1". | | 2 |
| 19. | Trammel | | 2 Nos. |
| 20. | Clamp 6" | | 4 " |
| 21. | Saw set Stanley type | | 4 " |
| 22. | Saw compass | 16" | 4 " |
| 23. | Saw hand | 26" | 2 " |
| 24. | Saw vice | 10m | 1 |
| 25. | Tape measuring steel | - | 1" |
| 26. | Pincer 6" | | 8" |
| 27. | Compass Wing 12" | | 4" |
| 28. | Goggles pair | | 4" |
| 29. | Plane rabbet adjustable with cutter set. | | 8" |
| 30. | Plane grooving 1/4" 1/8" cutter etc. | | 4 Nos. |
| 31. | Plane plough fitted with screw and set of cutters | | 4 " |
| 32. | Hammer, claw 1½" Lbs. | | 4 " |
| 33. | Screw driver 16" flat. | | 4 " |

| | | |
|-----|---|--------|
| 34. | Screw driver 9" | 8 " |
| 35. | File rasp bastered 10" | 8 " |
| 36. | Bit ratchet brace 10" | 4 " |
| 37. | Bit centre ¼ , 5/16, 3/8" and 1" set of | 4 sets |
| 38. | Auger ½" 5/8", 3/4", 7/8, & 1 set of 5 | 3 sets |
| 39. | Miter Box 24" x 24" | 4 Nos. |
| 40. | Spoke shave 2" cutter | 8 " |
| 41. | Punch nail | 6 " |
| 42. | Scriber 6" | 2 " |
| 43. | Centre punch | 2 " |
| 44. | Chisel cold flat 3/4" | 4 " |
| 45. | File flat rough 14" | 4 " |
| 46. | File half round | 4 " |
| 47. | File round 2 nd cut | |
| 48. | Working table 3' x 2' x 3' height | 4 " |
| 49. | Hand drill 1/4" capacity | 2 " |
| 50. | Twist drill 1/8" | 8 " |
| 51. | Cramp, bar carpenter 4ft. | 4 " |
| 52. | Cramp " 6 ft. | 4 " |
| 53. | Steel Almirah 6'x4'x18" | 1 |
| 54. | Steel lockers with 8 drawers (Standard size) | 2 |
| 55. | Fire buckets | 4 |
| 56. | Fire extinguisher | 2 |
| 57. | Bench grinder 6" wheels | |
| 58. | Planer 12" | 1 |
| 59. | Saw circular 12" dia with Motor. | |
| 60. | Lathe, wood working with set of cutters. | 1 |
| 61. | Number punch 1/4" | - |

Reference Books

| Sr No | Books Name | Authors |
|-------|----------------------------|------------------|
| 1 | Carpentry completer course | S.H.Bawa |
| 2 | Workshop Tech. I | Hajara Chaudhari |
