

SKVV : SYLLABUS FOR TRADE IN VOCATION TRAINING CERTIFICATE PROGRAM

DURATION: SIX MONTHS

TRADE : ARCHITECTURAL ASSISTANT

FIRST SEMESTER 1

Course Code No.	Trade Practical 01 (Building construction + Graphic presentation)	Trade Theory 01 (Building construction + Surveying)
VTC AA-101	<ul style="list-style-type: none"> ● Importance of safety and general precautions observed in the institute and in the section ● Importance of the trade in the development of the country's infrastructure ● All necessary guidance to be provided to the new comers to become familiar, with the working of training institute 	<ul style="list-style-type: none"> ● Familiarization with the institute ● Importance of trade training ● Introduction to the trade and professional prospects ● Recreational medical facilities and other extracurricular activities of the institute ● Types of jobs made by the trainees in the trade
VTC AA-102	GP <ul style="list-style-type: none"> ● Lettering – basics, vertical and inclined, forms and proportions, types of lettering strokes, composition, fonts (Gothic, Roman etc), writing sentence ● Sketches of landscape / monuments with water colours, pencil colours, crayons 	<ul style="list-style-type: none"> ● Importance of lettering, writing of letters and figures, sizes, proportion, etc. as per IS code ● Free hand sketching
VTC AA-103	Brick masonry <ul style="list-style-type: none"> ● Sizes of brick and brick tiles ● English and Flemish bond- for half brick thk. and one brick thk. wall 	BC – Brick masonry <ul style="list-style-type: none"> ● Technical terms used ● Principle of construction of bonds ● Scaffolding ● Tools and equipments used
VTC AA-104	Stone masonry <ul style="list-style-type: none"> ● Coarsed and uncoarsed rubble and random rubble masonry ● Ashlar - chamfered masonry 	BC - Stone masonry <ul style="list-style-type: none"> ● Technical terms ● Principles of stone masonry ● Classification of stone masonry
VTC AA-105	Foundation <ul style="list-style-type: none"> ● Types of foundation (pile, raft, spread, mat, column, retaining wall) 	BC – Foundation <ul style="list-style-type: none"> ● Purpose, causes of failure of foundation, bearing capacity of soils, dead load, live load ● Types of foundation (pile, raft, spread, mat, column, retaining wall) ● Setting out of building on ground excavation, shoring and simple machine
VTC AA-106	GP <ul style="list-style-type: none"> ● Color wheel – primary, secondary, tertiary colors ● Color schemes – monochromatic, tones and shades in any creative pattern ● Composition of pattern using different textures using different grade of pencils (H,HB,B,2B etc) 	Carpentry Joints <ul style="list-style-type: none"> ● Technical terms ● Classification of joints (lengthening spliced or longitudinal joints, bearing joints, angle or corner joints, oblique – shouldered joints, widening or side joints) and its uses in wood work GP <ul style="list-style-type: none"> ● Definition of color ● Qualities of color

		<ul style="list-style-type: none"> ●Color wheel ●Properties of color ●Methods of pencil use ●Pencil grades
VTC AA-107	DPC <ul style="list-style-type: none"> ●Detail at plinth level, on terrace and basement floor Carpentry joints <ul style="list-style-type: none"> ●Detail sketches of various types of carpentry joints 	Damp proof course <ul style="list-style-type: none"> ●Sources of dampness ●Effects of dampness ●Method of prevention of dampness in building ● Periodic repair and care for prevention ● Anti termite treatment
VTC AA-108	Doors <ul style="list-style-type: none"> ●Details of Paneled door, flush door, batten and ledged door Visit to any Construction site for better exposure to details	Doors <ul style="list-style-type: none"> ● Size of doors ●Door frame ●Types of doors Windows <ul style="list-style-type: none"> ●Size of window ●Classification of windows
VTC AA-109	Windows <ul style="list-style-type: none"> ●Casement window, louvered window, ventilator and its details 	Surveying <ul style="list-style-type: none"> ● Introduction ● Classifications ●plane survey ●Purpose of survey - instruments used
VTC AA-110	Surveying <ul style="list-style-type: none"> ● Drawing of conventional signs used in engineering survey, cadastral survey ●Topography and building drawing ● Practice in unfolding and folding chain, errors and adjustment of chains, alignment of chain / error chaining lines – measurements of distance between given points and their entry in field book ●Practice in chaining and taking off – set, use of optical square and cross staff setting out right angles – booking of measurements testing of chain , tape, optical square and cross staff. Compass survey <ul style="list-style-type: none"> ●Determining the bearings of a given line Observe the bearings of a given triangular plot Plane table surveying <ul style="list-style-type: none"> ●Practice on plane tabling by radiation method ●Practice on plane tabling by intersection method Levelling <ul style="list-style-type: none"> ●Determine the RL of a given two visible points from the given BM by simple levelling ●Determine the RL of a given points from a single instrument position 	Chain Survey <ul style="list-style-type: none"> ●Testing of chain, direct ranging, indirect ranging, degree of accuracy Compass surveying <ul style="list-style-type: none"> ●Prismatic compass, surveyors compass, advantages and disadvantages Plane table survey <ul style="list-style-type: none"> ●General, instrument used, advantages and disadvantages, orientation, methods used Levelling <ul style="list-style-type: none"> ●Introduction in levelling ●Types of levelling and levelling staff Total survey station <ul style="list-style-type: none"> ●Components used in total survey station ●Advantages of total survey station ●Electronic notebook
VTC AA-111	Project work / site visit <ul style="list-style-type: none"> ● Project work on a single floor residence with furniture layout – plan, front elevation and section (Single line diagram to be made available) ● Site visit to any of the construction site to observe the details 	