Assessment Guide

Scaffold Design Engineer

NSQF Level – 6

Sector: Cross Sectoral

Occupation: SCAFFOLDING ENGINEERING & MANAGEMENT

Qualification Pack Code: SSD/VSQ/Q0203

Version: 1.0

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Qualification Structure

To achieve full certification as Scaffold Design Engineer, trainees must complete all seven units (NOS) and pass assessments. The assessments will comprise of theory & practical tests.

Sl. no	Unit No. (NOS)	Title	Assessment method
001	SSD/VSQ/N0213	Scaffoldings & Specifications	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of different types of scaffoldings, their components, specifications, and applications under various site conditions. The assessment will evaluate the candidate's knowledge of safety protocols, applicable standards, and risks associated with improper scaffold selection or non-compliance with specifications. The assessment will be based on theory, viva-voice or practical.
002	SSD/VSQ/N0214	Understanding Scaffold Drawings & Designs, Indian & International Standard Codes	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of scaffolding drawings and design principles, including factors influencing scaffold design, load calculations, and safety parameters. The assessment will evaluate their understanding of structural stability, permissible loading, and adherence to safety standards and engineering guidelines for scaffold design and execution. The assessment will be based on theory, viva-voice or practical.

003	SSD/VSQ/N0215	Scaffold Design & Drawings using the scaffold & Computer-Aided Design (CAD) system	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of preparing scaffolding dimensional drawings using structural design software and computer-aided design (CAD) systems. Candidates will be assessed on their ability to create accurate 2D and 3D scaffolding drawings, interpret technical inputs, and incorporate required specifications in digital formats. The assessment will be based on theory, viva- voice or practical.
004	SSD/VSQ/N0216	Calculation of loads in scaffold designs as per Indian & International Standard	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of scaffolding design load calculations in accordance with IS-875, IS-3696, and other relevant international standards and codal provisions. Candidates will be assessed on their ability to perform basic and applied load calculations, interpret codal requirements, and apply design principles to ensure scaffold safety and stability. The assessment will be based on theory, viva-voice or practical.

005	SSD/VSQ/N0217	Analysis of Scaffold design using STAAD Pro as per applicable IS and International Codes	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of scaffold design analysis using STAAD Pro software, in accordance with applicable IS codes and international standards. The assessment will also evaluate their understanding of design specifications, load cases, boundary conditions, and industry best practices to ensure that scaffold designs meet safety, functionality, and compliance requirements. The assessment will be based on theory, viva- voice or practical.
006	SSD/VSQ/N0218	Plan, Organise & Monitor Scaffolding Safety Protocols	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of planning, organizing, and monitoring scaffolding safety protocols to ensure efficient and high-quality outcomes. The assessment will evaluate their capability to monitor work progress, identify potential risks or deviations, enforce compliance with safety standards, and ensure that scaffolding activities are executed with minimal hazards and maximum operational efficiency. The assessment will be based on theory, viva- voice or practical.

007	DGT/VSQ/N0102	Employability Skills	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding required by the professionals to generic skill in getting employment, financial dealing, digital literacy and communication with employer or customer. The assessment will be based on theory, viva- voice or practical.

Guidance for assessors

This qualification provides the performance criteria, skills and knowledge required to perform for the job role of Scaffold Design Engineer at NSQF Level 6. The role is referred to as 'Scaffold Design Engineer.'

Brief job description: A Scaffold Design Engineer is responsible for creating safe and efficient scaffold designs using industry standards and codes utilizes scaffold structural design software and computer-aided design (CAD) & systems to develop accurate scaffold drawings. The design engineer calculates loads in accordance with national & international standards and analyzes scaffold structures using design software like STAAD Pro software and have good understanding of scaffold specifications, drawings, Indian and international standard codes to ensure compliance and safety in scaffold designs.

Personal attributes: He should be physically & mentally fit and should be able to provide design advice on the suitability of specialized scaffolds to meet the health and safety requirements regarding design and technical advice on scaffolding works.

Introduction to assessments:

The assessment will be made based on the competencies required by the trainees to perform the job role of Scaffold Design Engineer. The assessment will be based on understanding, practical demonstration and on the job training as defined in the performance criteria & practical skill defined in the qualification pack of the job role. The trainees will be required to complete a number of assignments to show their skills & understanding of the subject through theory, demonstration and practical performances.

Grading and pass percentage

1. The assessment consists of two categories:
    a. Practical Assessment – to assess the practical performance skills.
    b. Theory Assessment – to assess knowledge & understanding of the domain.
2. The weightage of the assessment will be:
    a. Practical Assessment – 50%
    b. Theory Assessment – 50%
3. Each NOS for its Performance Criteria (PC) has been assigned marks proportional to its importance. Proportion of marks for Theory and Practical has been marked NOS wise.
4. Questions on practical & theory will be formed in such a way as to provide outcome on maximum Performance Criteria and in proportional way within the NOS.
5. The assessment for the theory part will be based on written questions (short question, multiple choice & viva, or a combination of them) created/approved by the SSDF.
6. The assessment for the practical part will be based on practical conducted for trainees. In case of remote/on-line assessments, the practical's can be carried through proctors or practical questions formulated based on pictorially represented logical questions (based on pictures of practical & logical steps) created/approved by the SSDF.
7. The passing and grading criteria of each NOS & cumulative for QP will be as follows: -
    a. 70% or more than 70% - Grade "A"
    b. 60% or more than 60% but less than 70% - Grade "B"
    c. 50% or more than 50% but less than 60% - Grade "C"
    d. Less than 50% - Grade "Fail."
    e. If individual gets less than 50% and 35% or more in the NOS and overall, 50% or more; individual will be considered "pass" with grade "C" only irrespective of overall marks.
    f. Individuals getting less than 50% in more than one NOS and getting overall marks 50% or more in QP will be put in grade "Fail".
    g. Any candidate can ask for re-assessment in any of the NOSs or all the NOSs to improve his/her performance within three months from the date of publication of the results and after payment of the assessment fee. But if any candidate wants re-assessment after three months from the

date of publication of results, he/she will have to appear in all the NOSs applicable for the qualification.

2.1 Performance/Skill Assessments

The performance/skill assessment will be conducted through demonstration/practical.

SSD/VSQ/N0213: Scaffoldings & Specifications– Performance/Skill Assessment

The trainee should demonstrate the ability to identify different types of scaffolds and their components, determine the appropriate scaffold based on site and load requirements, and detect faulty or damaged components. They must calculate scaffold loads and design loads accurately, and assess the requirements for components, tie-offs, and supports as per design. Additionally, the trainee should identify suitable fall protection systems and determine their effective application for various scaffold-related activities to ensure safe working conditions.

SSD/VSQ/N0214: **Understanding Scaffold Drawings & Designs, Indian & International Standard Codes –Performance/Skill Assessment**

The trainee should demonstrate a comprehensive understanding of scaffold drawings and designs, including the ability to interpret structural and safety elements such as standards, ledgers, transoms, braces, guardrails, toe boards, and access points. They must accurately read and analyze scaffold designs to extract relevant technical details including dimensions, platform arrangements, tie positions, and load-bearing specifications. The trainee should be capable of applying design and safety parameters in accordance with Indian Standards such as IS-2750 and IS-3696, ensuring compliance with structural stability and safety requirements.

SSD/VSQ/N0215: Scaffold Design & Drawings using the scaffold & Computer-Aided Design (CAD) system – Performance/Skill Assessment

The trainee should demonstrate a comprehensive understanding of scaffold design and dimensional drafting using computer-aided design (CAD) systems, including the ability to perform precise calculations to determine component dimensions and convert them accurately into appropriate drawing scales. They should apply standard drafting principles to generate detailed 2D and 3D scaffold drawings, including plans, sections, and elevations that clearly represent the scaffold structure. The trainee should be proficient in using CAD software tools, keyboard commands, and pull-down menus to create accurate and compliant drawings in line with industry norms.

SSD/VSQ/N0216: Calculation of loads in scaffold designs as per Indian & International Standard – Performance/Skill Assessment

The trainee should demonstrate a comprehensive understanding of scaffold load calculations in accordance with Indian and international standards, including the ability to identify various types of loads and load factors that influence scaffold design. They should accurately interpret and calculate design loads such as dead loads, imposed loads, and wind loads, and analyze their impact on scaffold stability and performance.

SSD/VSQ/N0217: Analysis of Scaffold design using STAAD Pro as per applicable IS and International Codes– Performance/Skill Assessment

The trainee should demonstrate a comprehensive understanding of scaffold design analysis using STAAD Pro software, including the ability to create structural models with accurate coordinates, nodes, dimensions, and specifications. They mu be able to draw scaffold assemblies in the software, clearly highlighting critical features such as bracing, support points, and joints in accordance with given specifications. The trainee should accurately apply calculated loads—dead, imposed, and wind—onto the model and carry out complete design analysis using STAAD Pro, ensuring that all inputs are aligned with design requirements.

SSD/VSQ/N0218: Plan, Organise & Monitor Scaffolding Safety Protocols– Performance/Skill Assessment

The trainee should demonstrate the ability to plan scaffolding activities by organizing resources, setting schedules, and aligning timelines with project requirements. They must understand the organizational hierarchy and effectively communicate with superiors and co-workers while assigning tasks to subordinates based on timelines and priorities. The trainee should be capable of organizing material and resource provisioning, briefing the team on work sequences, and ensuring clarity in responsibilities. They must monitor the progress of scaffolding work, manage resources efficiently, guide team members, and use appropriate tools for tracking and reporting.

DGT/VSQ/N0102: Employability Skills

The trainee should demonstrate awareness of employability skills and effectively use job and learning portals. They must understand constitutional values, practice ethical behavior, and follow sustainable practices. The trainee should apply 21st-century skills like time management, critical thinking, and emotional awareness in the workplace. They must communicate clearly in basic English—spoken, written, and read—and prepare a career plan with defined goals. The trainee should follow communication etiquette, work well in teams, and behave inclusively with all genders and PwD, with awareness of the POSH Act.

Performance/Skill Assessments

The assessment will be conducted in a simulated working environment. Due to this fact, the assessors must note that the naturally occurring evidence of competence is unavailable or infrequent. Simulation must be undertaken in a Realistic Working Environment which provides an environment that replicates the key characteristics of the workplace in which the skill to be assessed is normally employed.

Scheduling the practical observations is flexible but to retain integrity of the assessment, they should be conducted as closely as possible to the written assessments.

Trainees are not permitted to use the observation checklist to work when completing the practical tasks but may familiarize themselves with it prior to an assessment.
It will be beneficial to take trainees through what is required in the practical assessments and the way in which each part will be graded. Trainees should have an opportunity to familiarize themselves with the way the tasks are graded.

Trainees may refer to their faculty for guidance on parts of the practical assignments only, though they should be aware that, especially for the practical assessments, the amount of guidance and support they are given may be reflected in the feedback and performance.

Knowledge Assessment

Synoptic test is an MCQ (Multiple Choice Question) test to assess the underpinning knowledge. The synoptic MCQ tests are externally set and externally marked.

This test is to be taken by the trainee after completion of all the units under controlled and invigilated conditions as closed-book test under the supervision of an assessor. Trainees can only achieve whole

marks; half marks for partially answered questions are not permitted. Selection of two or more options will be marked as wrong.

The answers should be marked by pen only. The test may be conducted by the assessor in the oral mode, if required, considering the lack of reading and comprehending acumen (skills) of trainees. In such cases, the assessor will mention it on top of the MCQ submitted.

Grading criteria for Performance/Skill Assessments

NOS No.	Title	Performance & Knowledge Assessment Duration (Min)	Assessment Marks	Min. Passing marks	Assessment Result (Total Passing Marks)
SSD/VSQ/N0213	Scaffoldings & Specifications.	75	100	50% of individual NOS and 50% overall as per NOS weightage	50% of total NOS weightage ≥ Pass 50% of total NOS weightage < Fail
SSD/VSQ/N0214	Understanding Scaffold Drawings & Designs, Indian & International Standard Codes	53	100		
SSD/VSQ/N0215	Scaffold Design & Drawings using the scaffold & Computer-Aided Design (CAD) system	52	120		
SSD/VSQ/N0216	Calculation of loads in scaffold designs as per Indian & International Standard	30	110		
SSD/VSQ/N0217	Analysis of Scaffold design using STAAD Pro as per applicable IS and International Codes	74	120		

SSD/VSQ/N0218	Plan, Organise & Monitor Scaffolding Safety Protocols	32	100		
DGT/VSQ/N0102	Employability Skills	43	50		
Total		**360 Min**	**700 Marks**		

2.2 Viva Assessment

Trainees may be required to take the viva test for their theory or their practical observation test which is an extended part of the practical observation and assessment. The viva assessments are externally set and externally marked.

2.3 Question papers for synoptic test

The question paper of the synoptic test is a confidential document. It will be held under the custody of SSDF/Assessment Agencies. The assessment agencies can be permitted to prepare the question papers and get them approved from SSDF. The centers need to follow the indenting process to obtain the question paper to administer the test.

2.4 Authenticity

Centers are reminded to check for authenticity of work where trainees may be using texts and the internet to complete tasks.

2.5 Feedback

Assessors must provide feedback on every occasion when a skills observation takes place. A proforma for feedback is included in this assessment guide.

2.6 Trainee records of coursework

Trainees should be encouraged to keep their work carefully in a portfolio or scrapbook. This may be an unfamiliar form of record keeping for some, but it is a good discipline which will benefit them when they progress in their learning and training.

2.7 Assessment sheets

The assessment records will be maintained as per the assessment sheet given in this document.

2.8 Codes of practice

Safe working practices, health and safety and codes of practice associated with the industry must always be adhered to.

2.9 Health and safety

The requirement to follow safe working practices is an integral part of all assessments and it is the responsibility of centers to ensure that all relevant health and safety requirements are in place before trainees start practical assessments.

Should a trainee fail to follow health and safety practice and procedures during an assessment, the assessment must be stopped and the trainee be advised of the reasons. In case of doubts, guidance should be sought from the SSDF.

2.10 Verification of assignments

By using marking checklists, verifiers can check that evidence for an assignment is complete and can ensure that allocation of marks has been fair and beyond dispute.

2.11 Internal quality assurance

Approved centers must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications.

Quality assurance includes initial center approval, qualification approval and the Centre's own internal procedures for monitoring quality. Centers are responsible for internal quality assurance and SSDF and Assessment Agency are jointly responsible for external quality assurance.

Full details and guidance on the internal and external quality assurance requirements and procedures are provided by SSDF from time to time.

The Assessment Agencies are required to retain copies of trainees' assessment records and photographic evidence (in presence of trainee performing task) for three years after assessment. They can be asked by SSDF to provide these evidences as proof of assessment.

2.12 Evidence Collection by the Assessor

- The assessor needs to collect a copy of the attendance for the training done. The attendance sheet needs to be signed by the Training Centre Head.
- The Centre head also needs to declare that all the students appearing in the assessments have a minimum attendance of 70% for the training.

- The assessor needs to verify the authenticity of the candidate by checking the photo ID card issued by the institute as well as any one Photo ID card issued by the Central/ State Government.
- The same needs to be mentioned in the attendance sheet. Wherever required, the assessor can authenticate and cross verify trainee's credentials in the enrollment form.
- The assessor needs to punch the trainee's roll number on all the final job pieces of learners. Different sections can have alpha numbering such as if a student's roll number is 123 then the three pieces submitted by that student can be numbered as 123a, 123b and 123c.
- The assessor needs to take a group photograph of all the students along with the assessor standing in the middle and with the Centre name/banner at the back, as evidence.
- The assessor needs to carry a camera to click photographs of the trainees working on the job and give theory exam as evidence with geo tagged, timestamp.
- The assessor also needs to carry a photo ID card.
- In the Assessment Evidence Form (provided after the practical marks sheet), the assessor should place the final photographic evidence in the space provided as evidence, from appropriate angles/sides of the final job piece submitted.

Trainee Guidance

Information for trainees

The assessment requires a trainee to perform a combination of tasks as given below:

The trainee will be required to demonstrate the occupational skills, knowledge, understanding and competencies mentioned in the Qualification Pack.

Before the final assessments

The training partner (TP) will ensure that the trainees are ready for the assessment. The date and time of assessment would be intimated by the SSDF.

The trainee is required to reach the assessment venue at the scheduled date and time. TP is required to circulate/download the information regarding the assessment to the trainee. Failure to reach the assessment venue for the theory or the practical test as per the schedule would be considered

absent. In exceptional cases, an assessor can give a maximum of half an hour of concession time for late coming.

The trainee is required to carry their Institutes photo ID card as well as a government issued photo ID card for verification on all days of assessments.

Any misbehavior/unethical practice by a trainee would lead to disqualification of the trainee.

The first assessment will have the theory test followed by practical and may be viva in smaller batches. (20- 30 trainees)

Assessments

Assessments for the job role of Scaffold Design Engineer are conducted to gauge and assess the trainees' competencies and professional expertise as well as their skill and knowledge in the specified job role for Scaffold Design Engineer.

During the practical task, trainees will be assessed on their workmanship, quality of finished products, time management, etc., based on the performance criteria (PC), knowledge and understanding and their professional and soft skills as specified in the qualification pack. They will be graded for all their assessments based on the approved assessment strategy of the Qualification Pack. The performance criteria checklist as a guide for all qualifications is given in Practical Observation Checklist. Assessment tools and sample set of practical, theory & viva questions for each NOS, assessment evidence, overall summary, and NOS wise summary are also listed.

Scaffold Design Engineer
1. Learner Name: _____2. Enrolment No: _____3. Centre:_____
Guidance to assessors: 1. The assessor must exhibit the observation checklist to the learners before the commencement of the practical and explain to them how the learners will be observed and graded during the practical assessment. However, the learners are not allowed to use the practical observation checklist during the assessment or task. 2. The assessor must ensure that all the tools listed in the "List of Tools" are made available by the center to every learner being assessed.

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
SSD/VSQ/N0213: Scaffoldings & Specifications	PC-1 Identify various types of scaffolds, their components.	9	6	-	-
	PC-2 Determine type of scaffold required as per site & load requirements.	6	4	-	-
	PC-3 Identify working & faulty components and defects in the components.	6	4	-	-
	PC-4 Calculate load on scaffold & optimum load.	6	4	-	-
	PC-5 Calculate design load for the scaffold.	6	4	-	-
	PC-6 Analyze Working requirements of components, tie-offs, supports etc. of the scaffoldings as per design requirement.	9	6	-	-
	PC-7 Identify types of fall protection for the scaffolds, tie-offs, supports and ladders.	9	6	-	-
	PC-8 Work out fall protections required in the scaffold for various activities and effectiveness.	9	6	-	-
	Total Marks	**60**	**40**	-	-
SSD/VSQ/N0214: Understanding Scaffold Drawings &	PC-1 Interpret scaffold drawings & safety elements.	9	6	-	-
	PC-2 Interpret scaffold drawings & designs.	6	4	-	-

Designs, Indian & International Standard Codes	PC-3 Interpret details of scaffold drawings.	6	4	-	-
	PC-4 Work out design & safety parameters of scaffolds as per Indian Standards IS-2750 & IS-3696.	9	6	-	-
	PC-5 Work out design details of scaffold as per International Standards of OSHA & BS standards & safety parameters.	6	4	-	-
	PC-6 Check design details of scaffolds and its interpretations	6	4	-	-
	PC-7 Identify fall protections & design for fall protection.	6	4	-	-
	PC-8 Work out details of ladder/temporary ladder requirements & design.	6	4	-	-
	PC-9 Analyze factors affecting designing of scaffold.	6	4	-	-
	Total Marks	**60**	**40**	**-**	**-**
SSD/VSQ/N0215: Scaffold Design & Drawings using the scaffold & Computer-Aided Design (CAD) system	PC1. Carry out necessary calculations to compute dimensions of various components/ parts of drawings.	6	4	20	-
	PC2. Convert the dimensions to the required scale to input in the system.	6	4		-
	PC3. Use drafting principles to produce cad drawings showing plans, sections, elevations, and different types of views.	6	4		-

	PC4. Use appropriate commands in the software to draw the required drawings as per standard practices.	6	4		-
	PC5. Use keyboard commands and pull-down menus available in common CAD systems to prepare the drawings.	6	4		-
	PC6. Use codes and other references that follow the required conventions.	6	4		-
	PC7. Draw structures to highlight critical features in accordance with specifications and requirements.	6	4		-
	PC8. Draw scaffold assemblies to highlight critical features as per specification.	6	4		-
	PC9. Create tables to denote the name, dimensions, perimeter, and area of various parts or components as per client requirement.	6	4		-
	PC10. Use relevant and appropriate symbols as per drawing requirements to provide details in the drawings.	6	4		-
	NOS Total Marks	**60**	**40**	**20**	**-**
SSD/VSQ/N0216: Calculation of loads in scaffold designs as per Indian & International	PC-1 Identify loads & load factors affecting scaffold design.	6	4		-
	PC-2 Comprehend design load calculation on scaffold.	6	4		-
	PC-3 Analyzes dead loads, imposed loads and wind loads on scaffolds.	6	4	10	-

Standard	PC-4 Analyze load IS-875 and its element applicable for scaffolds.	6	4		-
	PC-5 Analyze provisions of IS-3696.	6	4		-
	PC-6 Apply IS-875 & IS-3696 in load calculation and international codes & practices.	6	4		-
	PC- 7 Calculate dead load details of scaffold as per Indian Standard code for scaffold.	6	4		-
	PC-8 Calculate imposed loads & wind loads as per Indian & International standard codes for scaffolds.	6	4		-
	PC-9 Calculates combination of loads on scaffold.	6	4		-
	PC-10 Check design details of the scaffold as per international design standards.	6	4		-
	NOS Total Marks	**60**	**40**	**10**	**-**
SSD/VSQ/N0217: Analysis of Scaffold design using STAAD Pro as per applicable IS and international codes	PC1. Draw structures to coordinates, nodes, dimensions and specification.	6	4		-
	PC2. Draw scaffold assemblies to highlight critical features as per specification.	6	4	20	-
	PC-3 Apply loads on scaffold as per calculations.	6	4		-
	PC-4. Carry out the scaffold design in software for complete analysis.	6	4		-

	PC-5 Determine the required scaffold components and their placement based on design calculations and load requirements.	6	4		-
	PC-6 Ensure compliance with relevant codes and standards throughout the design and analysis process.	6	4		-
	PC-7 Read and understand the analyzed results and understand the outcome.	5	3		-
	PC-8 Extract the required result and prepare the checklist for each component.	4	2		-
	PC-9 Check critical nodes and each of the inspection points of the scaffold.	3	3		-
	PC-10 Prepare & extract the software drawing after analysis.	5	3		-
	PC-11 Prepare and extract result data after analysis for checking & records.	4	2		-
	PC-12 Prepare the data sheet and drawing sheet extracted from the software after analysis for records.	3	3		-
	NOS Total Marks	**60**	**40**	**20**	**-**
SSD/VSQ/N0218: Plan, Organize & Monitor Scaffolding Safety Protocols	Plan the resources, schedules and timelines as per work timelines given by superiors.	12	8	-	-
	PC-2 Understand hierarchy of the organization and communicate to concerned co-workers & superiors.	6	4	-	-

	PC-3 Task the subordinates as per task & timelines.	6	4	-	-
	PC-4 Organize resource collection and provisioning.	6	4	-	-
	PC-5 Communicate & Organize effective communication to concerned co-workers & superiors.	6	4	-	-
	PC-6 Brief the subordinates about the schedule, sequence, timing & resources.	6	4	-	-
	PC-7 Monitor progress of work, management of resources, guidance to subordinates and monitoring tools.	6	4	-	-
	PC-8 Learn reporting procedure & tools, report preparation to superiors and keeping the other teams informed.	6	4	-	-
	PC-9 Analyze Documentations methods, record maintenance, report submission & compliances	6	4	-	-
	NOS Total Marks	**60**	**40**	**-**	**-**
DGT/VSQ/N0102: Employability Skills	PC- 1 Identify employability skills required for jobs in various industries.	0.5	0.5	-	-
	PC- 2 Identify and explore learning and employability portals.	0.5	0.5	-	-
	PC- 3 Recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	0.5	0.5	-	-
	PC- 4 Follow environmentally sustainable practices.	0.5	0.5	-	-

	PC- 5 Recognize the significance of 21st Century Skills for employment.	3	-	-	-
	PC- 6 Practice the 21st Century Skills such as Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life.	2	1	-	-
	PC- 7 Use basic English for everyday conversation in different contexts, in person and over the telephone.	1	1	-	-
	PC- 8 Read and understand routine information, notes, instructions, mails, letters etc. written in English.	1	1	-	-
	PC- 9 Write short messages, notes, letters, e-mails etc. in English.	1	1	-	-
	PC- 10 Understand the difference between job and career.	1	-	-	-
	PC- 11 Prepare a career development plan with short- and long-term goals, based on aptitude.	1	1	-	-
	PC- 12 Follow verbal and non-verbal communication etiquette and active listening techniques in various settings.	2	-	-	-
	PC- 13 Work collaboratively with others in a team.	1	1	-	-
	PC- 14 Communicate and behave appropriately with all genders and PwD.	0.5	0.5	-	-

	PC- 15 Escalate any issues related to sexual harassment at workplace according to POSH Act.	0.5	0.5	-	-
	PC- 16 Select financial institutions, products, and services as per requirement.	0.5	0.5	-	-
	PC- 17 Carry out offline and online financial transactions, safely and securely.	1	1	-	-
	PC- 18 Identify common components of salary and compute income, expenses, taxes, investments etc.	0.5	0.5	-	-
	PC- 19 Identify relevant rights and laws and use legal aids to fight against legal exploitation.	0.5	0.5	-	-
	PC- 20 Operate digital devices and carry out basic internet operations securely and safely.	1	1	-	-
	PC- 21 Use e- mail and social media platforms and virtual collaboration tools to work effectively.	2	2	-	-
	PC- 22 Use basic features of word processor, spreadsheets, and presentations.	1	1	-	-
	PC- 23 Identify diverse types of Entrepreneurship and Enterprises and assess opportunities for potential business through research.	2	-	-	-
	PC- 24 Develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and	1	1	-	-

	Promotion.				
	PC- 25 Identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity.	1	1	-	-
	PC- 25 Identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity.	1	1	-	-
	PC- 26 Identify diverse types of customers	0.5	0.5	-	-
	PC- 27 Identify and respond to customer requests and needs in a professional manner.	0.5	0.5	-	-
	PC- 28 Follow appropriate hygiene and grooming standards.	-	0.5	-	-
	PC- 29 Create a professional Curriculum vitae (Résumé).	0.5	-	-	-
	PC- 30 Search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively.	0.5	0.5	-	-
	PC- 31 Apply to identified job openings using offline /online methods as per requirement.	0.5	0.5	-	-
	PC- 32 Answer questions politely, with clarity and confidence, during recruitment and selection.	0.5	-	-	-
	PC- 33 Identify apprenticeship opportunities and register for it as per	0.5		-	-

	guidelines and requirement.				
	Total Marks	**30**	**20**	-	-
Grand Total: 700		**390**	**260**	**50**	

Tools, materials, and consumable list

List of Tools and Equipment

Batch Size: 30

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
•	Podger spanner	Nos	1
•	Ring spanner	Nos	1
•	Open-End Spanner	Nos	1
•	Claw hammer	Nos	1
•	Mash hammer	Nos	1
•	Vernier caliper	Nos	1
•	Hack saw blade with frame	Nos	1
•	Line string	Nos	1
•	Knife	Nos	1
•	Wheel pulley	Nos	1
•	Drilling machine	Nos	1
•	Adjustable screw jack base plate	Nos	1
•	Spigot with bolts and nuts	Nos/set	1
•	H-frame Scaffold	Nos	1
•	Cup Lock System Scaffold (vertical, ledger, transom)	Nos/set	1
•	Ring Lock system Scaffold	Nos/set	1
•	Cross bracings	Nos	1
•	Extension pipes	Nos	1
•	Sole boards	Nos	1
•	GI Pipe 48.3 mm OD, 4mm thick	Nos	1

•	Swivel coupler	Nos	1
•	Right angle coupler	Nos	1
•	Putlog coupler	Nos	1
•	Sleeve coupler	Nos	1
•	Stairway set (including all components)	Nos	1
•	Ladder 6.0 mt	Nos	1
•	Ladder 3.0 mt	Nos	1
•	Ladder clamps(Suitable to ladder)	Nos	1
•	Toe guard	Nos	1
•	Wooden planks	Nos	1
•	Staircase tower scaffold with components (as per manufacturer)	Nos	1
•	Mobile tower scaffold with components (as per manufacturer)	Nos	1
•	Safety Net	Nos	1
•	Steel scale	Nos	1
•	Try square	Nos	1
•	Spirit level	Nos	1
•	Plumb bob	Nos	1
•	Measuring tape	Nos	1
•	Safety Helmet	Nos	1
•	Safety goggles	Nos	1
•	Safety shoes	Nos	1
•	Safety belt	Nos	1
•	Safety Harness	Nos	1

•	Cotton Hand - Gloves	Nos	1
•	Barricading tape	Nos/Roll	1

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Blackboard / White board
2. Marker
3. Projector
4. Laptop with relevant software
5. Working Models
6. Open yard for practical's

Assessment Method/Tools

SSD/VSQ/N0213: Scaffoldings & Specifications

A. Practical Questions **Total Marks:40**

Demonstrate the process of inspecting, assembling, and verifying the stability of a scaffold system while ensuring compliance with load calculations and fall protection requirements. Follow the five steps below to complete the task.

B. Multiple Choice Questions (12*5=60 marks)

01	Which type of scaffold is suspended from the top and does not touch the ground?			
	☐	A. Tube and coupler scaffold	☐	B. Mobile scaffold
	☐	C. Suspended scaffold	☐	D. Cantilever scaffold
02	The part of a scaffold that provides lateral stability and prevents swaying is called _____.			
	☐	A. Guardrail	☐	B. Bracing
	☐	C. Base plate	☐	D. Plank
03	A construction site requires scaffolding for an indoor electrical wiring job where frequent movement is needed. Which type of scaffold is most suitable?			
	☐	A. Suspended scaffold	☐	B. Single-pole scaffold
	☐	C. Mobile scaffold	☐	D. Cantilever scaffold
04	Which of the following is NOT a defect in scaffold components?			
	☐	A. Rust on metal parts	☐	B. Properly secured base plates
	☐	C. Bent or deformed frames	☐	D. Loose connections between tubes

05	Which component helps to distribute the weight of the scaffold evenly on the ground?			
		A. Ledger		B. Base plate
		C. Guardrail		D. Toe board
06	If a scaffold platform has an area of 3m × 2m and can support 200kg/m^2, what is the maximum allowable load?			
		A. 1000 kg		B. 1200 kg
		C. 800 kg		D. 600 kg
07	What is included in the calculation of the design load of a scaffold?			
		A. Weight of workers only		B. Weight of workers, tools, and materials
		C. Wind speed only		D. Paint weight on the scaffold
08	The design load should be calculated by considering a safety factor of at least _____ times the expected load.			
		A. 1.5		B. 2.0
		C. 4.0		D. 3.5
09	Which of the following components is used to anchor a scaffold to a permanent structure for added stability?			
		A. Base plate		B. Tie-off
		C. Guardrail		D. Scaffold plank
10	Which type of fall protection is commonly used when working at heights above 2 meters?			
		A. Rope ladder		B. Safety net
		C. Loose planks		D. Wooden braces

11	The vertical barrier that prevents workers from falling off a scaffold platform is called a _____.			
	☐	A. Guardrail	☐	B. Scaffold plank
	☐	C. Base plate	☐	D. Cross brace
12	Which of the following is NOT a fall protection measure for scaffolding?			
	☐	A. Safety harness	☐	B. Guardrails
	☐	C. Loose planks	☐	D. Toe boards
SSD/VSQ/N0214: Understanding Scaffold Drawings & Designs, Indian & International Standard Codes				
A. Practical Questions **Total Marks:40**				
Demonstrate the process of creating scaffold design drawings in a CAD system by performing calculations, scaling, drafting, and annotating key components. Follow the five steps below to complete the task.				
B. Multiple Choice Questions (12*5=60 marks)				
13	In scaffold design drawings, which component is responsible for preventing lateral movement?			
	☐	A. Standards	☐	B. Ledgers
	☐	C. Braces	☐	D. Base plates
14	A _____ in a scaffold drawing represents a fixed horizontal structural member.			
	☐	A. Guardrail	☐	B. Ledger
	☐	C. Ledger	☐	D. Toe board
15	A construction site requires scaffolding for a building with curved facades. What type of scaffold design should be considered?			
	☐	A. Cantilever scaffold	☐	B. Tube and coupler scaffold

	☐	C. Frame scaffold	☐	D. Mobile scaffold
16	What is the primary function of a key plan in scaffold drawings?			
	☐	A. Shows load calculations	☐	B. Highlights critical safety areas
	☐	C. Provides an overview of scaffold layout	☐	D. Lists material specifications
17	In a scaffold drawing, what do evenly spaced vertical lines typically represent?			
	☐	A. Guardrails	☐	B. Standards
	☐	C. Toe boards	☐	D. Diagonal braces
18	Which feature in scaffold drawings is used to ensure proper weight distribution?			
	☐	A. Toe boards	☐	B. Bracing systems
	☐	C. Guardrails	☐	D. Planks
19	As per IS-2750, what is the recommended minimum overlap for scaffold planks?			
	☐	A. 100 mm	☐	B. 200 mm
	☐	C. 300 mm	☐	D. 400 mm
20	According to BS standards, what is the maximum spacing between scaffold ties in a brickwork facade?			
	☐	A. 2.5 meters	☐	B. 3.5 meters
	☐	C. 4 meters	☐	D. 5 meters
21	Which of the following must be checked before approving a scaffold design?			
	☐	A. Type of worker safety gear	☐	B. Load-bearing capacity
	☐	C. Number of workers assigned	☐	D. Color of scaffold components

22	The height at which fall protection becomes mandatory for scaffolding is typically _____ meters.			
	☐	A. 1.5	☐	B. 2
	☐	C. 3	☐	D. 4
23	What is the recommended angle for ladder placement on scaffolds?			
	☐	A. 30 degrees	☐	B. 45 degrees
	☐	C. 75 degrees	☐	D. 90 degrees
24	Which of the following factors is MOST critical when designing scaffolds for high-rise buildings?			
	☐	A. Scaffold color	☐	B. Wind load
	☐	C. Worker experience	☐	D. Type of fasteners

SSD/VSQ/NO215: Scaffold Design & Drawings using the scaffold & Computer-Aided Design (CAD) system

A. Practical Questions **Total Marks:40**

Demonstrate the process of creating scaffold design drawings in a CAD system by performing calculations, scaling, drafting, and annotating key components. Follow the five steps below to complete the task.

B. Multiple Choice Questions (12*5=60)

25	You need to determine the length of a diagonal brace in a scaffold that is 3m high and 4m wide. Which formula should you use?			
	☐	A. Load distribution formula	☐	B. Pythagorean theorem
	☐	C. Moment of inertia formula	☐	D. Structural weight formula
26	The factor of safety in scaffold design is determined by dividing the ultimate load by the _____ load.			
	☐	A. Minimum	☐	B. Allowable

		C. Design		D. Working
27	If a scaffold component measures 6000 mm in real life and needs to be drawn at a scale of 1:100, how long will it appear in the CAD drawing?			
		A. 6 mm		B. 60 mm
		C. 600 mm		D. 6000 mm
28	Which drawing method is commonly used to create a 3D representation of a scaffold?			
		A. Orthographic projection		B. Isometric drawing
		C. Sectional drawing		D. Plan drawing
29	Which CAD command is used to create a mirror image of a scaffold component?			
		A. Rotate		B. Scale
		C. Mirror		D. Offset
30	What is the function of the "TRIM" command in CAD software?			
		A. Extend a line		B. Cut unwanted sections
		C. Scale a drawing		D. Rotate an object
31	The Indian Standard code that provides safety guidelines for scaffolds is _____.			
		A. IS 800		B. IS 3696
		C. IS 456		D. IS 2750
32	Which feature in a scaffold drawing highlights weak points or areas that require reinforcement?			
		A. Hatch patterns		B. Load distribution tables
		C. Annotations		D. Exploded views

33	The representation of load-bearing beams in scaffold drawings is typically done using:			
		A. Dashed lines		B. Bold solid lines
		C. Red shading		D. Cross-hatching
34	A scaffold assembly requires guardrails, toe boards, and fall protection tie-offs. Which drawing feature should you include for clarity?			
		A. A bill of materials		B. A 2D elevation view with labeled safety features
		C. A simple hand sketch		D. A table with only component dimensions
35	In a scaffold parts table, which of the following is an essential parameter?			
		A. Worker weight		B. Paint color
		C. Perimeter of scaffold planks		D. Manufacturer logo
36	What does a circle with a cross inside represent in scaffold CAD drawings?			
		A. Load-bearing support		B. Junction box
		C. Fall arrest anchor point		D. Wind load assessment

SSD/VSQ/N0216: Calculation of loads in scaffold designs as per Indian & International Standard

A. Practical Questions **Total Marks:40**

Demonstrate the procedure for applying Indian and International Standard codes in scaffold load calculations, ensuring accurate evaluation and compliance. Follow the five steps below to complete the task.

B. Multiple Choice Questions (12*5=60)

37	A multi-story scaffold structure is being erected for a long-term project. Which factor is the most critical when assessing load factors?			
		A. Duration of project		B. Weather conditions
		C. Load-bearing capacity of scaffold components		D. Number of workers assigned

38	What is a key consideration when designing a scaffold for a high-wind zone?			
		A. Increased bracing and tie-ins		B. Reducing scaffold height
		C. Increasing worker load capacity		D. None of the above
39	In scaffold design, the _____ is the force exerted by gravity on a stationary object, such as the scaffold structure itself.			
		A. Dead load		B. Imposed load
		C. Wind load		D. Live load
40	Which of the following represents an imposed load on a scaffold?			
		A. The weight of the scaffold tubes		B. The weight of planks and guardrails
		C. The weight of workers and equipment placed on the scaffold		D. The weight of tie-ins and bracings
41	IS-875 provides guidelines on which type of load considerations for scaffold structures?			
		A. Dead loads only		B. Wind loads only
		C. Imposed loads only		D. All of the above
42	Which section of IS-3696 specifically deals with safety requirements for scaffold construction?			
		A. Part 1		B. Part 2
		C. Part 3		D. Part 4

43	Which international standard is commonly used along with IS-875 for wind load calculations in scaffold design?			
		A. EN 131		B. OSHA 1926
		C. BS 6399		D. ANSI A10.8
44	What is the primary purpose of calculating dead loads in scaffold design?			
		A. To determine the required number of workers		B. To evaluate the material strength and stability
		C. To estimate the cost of scaffold components		D. To determine ladder requirements
45	In scaffold design, which component is NOT considered part of the dead load?			
		A. Guardrails		B. Scaffold platforms
		C. Wind pressure on the scaffold		D. Cross braces
46	Wind load on scaffolds is calculated based on:			
		A. The number of workers on the scaffold		B. The height and exposed surface area of the scaffold
		C. The number of braces and tie-offs used		D. The material of the scaffold planks
47	The _____ load is the sum of all individual loads applied to the scaffold, including dead, imposed, and wind loads.			
		A. Working		B. Ultimate
		C. Equivalent		D. Partial

48	A scaffold is being designed for a site with unpredictable wind gusts and uneven ground. What factor should be given the highest priority?			
		A. Increasing the number of workers per level		B. Using lightweight materials to reduce dead load
		C. Ensuring proper anchoring and bracing		D. Reducing the height of the scaffold

SSD/VSQ/N0217: Analysis of Scaffold design using STAAD Pro as per applicable IS and International Codes

A. Practical Questions **Total Marks:40**

Demonstrate the process of verifying scaffold structural integrity using STAAD Pro, ensuring proper load application, critical node inspection, and compliance with safety standards. Follow the five steps below to complete the task.

B. Multiple Choice Questions (12*5=60)

49	The first step in scaffold structural design is defining _____ to establish reference points.			
		A. Material properties		B. Coordinates
		C. Aesthetic elements		D. Cost analysis
50	What is an essential feature when drawing scaffold assemblies?			
		A. Placement of braces and load-bearing elements		B. Random arrangement of supports
		C. Only vertical members without braces		D. Aesthetic detailing
51	The _____ of the scaffold must be calculated accurately to ensure structural stability under operational conditions.			
		A. Color scheme		B. Applied load
		C. Scaffold painting		D. Worker capacity

52	What is the primary purpose of using STAAD Pro for scaffold analysis?			
	☐	A. To evaluate load distribution and structural integrity	☐	B. To create a 3D visual effect
	☐	C. To determine color schemes for aesthetics	☐	D. To reduce the number of components
53	A scaffold design requires additional load-bearing components due to an increase in working load. What should be done?			
	☐	A. Increase the number of braces and supports accordingly	☐	B. Reduce the braces to save costs
	☐	C. Ignore the change and proceed	☐	D. Only add visual markers to indicate extra load
54	Which of the following standards apply to scaffold design in India?			
	☐	A. IS codes and international standards	☐	B. Only OSHA guidelines
	☐	C. Company-specific guidelines only	☐	D. No standards are required
55	The results of scaffold analysis should be reviewed to ensure _____ and compliance with safety guidelines.			
	☐	A. Aesthetic appeal	☐	B. Load distribution accuracy
	☐	C. Worker assignments	☐	D. Decoration preferences
56	What is the main purpose of preparing a checklist after scaffold analysis?			
	☐	A. To confirm all components meet safety standards	☐	B. To note the project's cost
	☐	C. To assign worker roles	☐	D. To document only visual aspects

57	In scaffold analysis, critical nodes must be checked to ensure _____ and structural safety.			
		A. Even distribution of paint		B. Proper load distribution
		C. Minimum labor requirement		D. Fast dismantling
58	What should be extracted after scaffold design analysis in software?			
		A. The analyzed scaffold drawing for verification		B. A simple sketch without calculations
		C. Material cost estimates		D. Worker attendance details
59	A newly designed scaffold structure must undergo safety verification. What data should be extracted from STAAD Pro for checking?			
		A. Structural calculations and component stresses		B. The project budget and cost analysis
		C. The scaffold's external appearance report		D. Informal notes on scaffold size
60	What must be included in the final scaffold data sheet?			
		A. Structural calculations and scaffold component list		B. Only a rough sketch
		C. Only the estimated weight of the scaffold		D. Decorative elements only

SSD/VSQ/N0218: Plan, Organize & Monitor Scaffolding Safety Protocols

Practical Questions **Total Marks:40**

Demonstrate the process of organizing, monitoring, and reporting scaffolding activities while ensuring adherence to safety protocols and communication best practices. Follow the five steps below to complete the task.

B. Multiple Choice Questions (12*5=60)

61	You are assigned a scaffolding project with multiple phases. How should you approach scheduling?			
		A. Break down tasks into phases and set realistic timelines		B. Assign all work to a single phase for faster completion
		C. Ignore scheduling and let workers decide on task priority		D. Adjust schedules only if a problem arises

62	Why is it important to follow the organizational hierarchy in scaffolding operations?			
	☐	A. To ensure smooth communication and role clarity	☐	B. To delay work execution
	☐	C. To bypass safety procedures	☐	D. To allow workers to make decisions independently
63	When assigning tasks to subordinates, what should be considered first?			
	☐	A. Their skill level and job role	☐	B. The type of scaffolding material used
	☐	C. The weather forecast	☐	D. The supervisor's availability
64	How can you ensure efficient task execution among subordinates?			
	☐	A. Assign all tasks randomly	☐	B. Provide clear instructions and timelines
	☐	C. Let workers decide their own priorities	☐	D. Ignore any confusion they might have
65	The primary objective of resource organization in scaffolding is:			
	☐	A. Storing materials randomly without tracking	☐	B. Reducing material usage even if it affects safety
	☐	C. Ensuring materials and equipment are available as per the project schedule	☐	D. Avoiding communication with procurement teams
66	Which method ensures effective communication in a scaffolding team?			
	☐	A. Relying only on verbal instructions	☐	B. Holding regular briefings and using documented communication channels
	☐	C. Avoiding communication to save time	☐	D. Letting workers assume their responsibilities
67	What should be included in daily scaffolding briefings?			
	☐	A. Only the project completion date	☐	B. Employee salary details
	☐	C. Task allocation, safety guidelines, and progress updates	☐	D. Irrelevant topics unrelated to work

68	A key aspect of briefing subordinates is:			
	☐	A. Informing them about project finances	☐	B. Allowing them to create their own schedule
	☐	C. Providing only safety information and ignoring work details	☐	D. Ensuring they understand the schedule, sequence, and available resources
69	What is a primary responsibility when monitoring scaffolding progress?			
	☐	A. Ensuring work is completed as per plan while addressing any challenges	☐	B. Allowing delays without corrective action
	☐	C. Ignoring progress reports	☐	D. Changing schedules daily without reason
70	In scaffolding projects, monitoring tools help supervisors _____ for improved efficiency.			
	☐	A. Reduce team communication	☐	B. Track work progress and identify delays
	☐	C. Assign work randomly	☐	D. Ignore reporting requirements
71	A good scaffolding project report should include:			
	☐	A. Only financial details	☐	B. Work progress, safety compliance, and required improvements
	☐	C. Employee personal details	☐	D. Unrelated project discussions
72	The purpose of maintaining scaffold documentation is to:			
	☐	A. Reduce project visibility	☐	B. Store irrelevant paperwork
	☐	C. Ensure compliance, safety records, and progress tracking	☐	D. Avoid accountability
DGT/VSQ/N0102: Employability Skills				
A. Practical Questions **Total Marks:30**				
Demonstrate the process of applying for a job, preparing for an interview, and securing employment or an apprenticeship in the scaffolding industry. Follow the five steps below to complete the task.				
B. Multiple Choice Questions (4*5=20)				

73	What is the best way to ensure effective communication with Persons with Disabilities (PwD) in the workplace?			
	☐	A. Use respectful language and offer necessary assistance	☐	B. Avoid interacting with them to prevent discomfort
	☐	C. Assume they do not need any support	☐	D. Speak loudly to make them understand
74	Which statement best describes the difference between a job and a career?			
	☐	A. A career involves long-term professional growth, while a job is short-term	☐	B. A job always pays more than a career
	☐	C. A career requires no skill development	☐	D. A job is always more stable than a career
75	Which of the following is an example of a mandatory salary deduction?			
	☐	A. Provident Fund (PF) contribution	☐	B. Shopping expenses
	☐	C. Travel allowance	☐	D. Entertainment allowance
76	What is the best approach when handling a difficult customer?			
	☐	A. Listen to their concerns and find a solution	☐	B. Ignore their complaints
	☐	C. Argue with them to prove your point	☐	D. Ask them to leave immediately

Assessment Evidence Form

Trainee name: **Trainee roll number:**

Centre name/ Code Date:

This is to confirm that the trainee has handed over the final job to the assessor. (For each task separate sheet can be used).

Assessor to affix photographs of the practical output (end product)

Trainee's signature:

_____

Trainee's name (please print):

_____

Assessor's signature:

_____

Assessor's name (please print):

_____

Centre Head's seal and signature:

_____

Assessment summary

Assessor's comments

.....

.....

.....

This is to confirm that the trainee has undertaken the assessment for the job role of Scaffold Design Engineer.

Trainee's signature:

_____

Trainee's name (please print):

_____

Assessor's signature:

_____

Assessor's name (please print):

_____

Centre Head's seal and signature:

_____

Trainee's photo ID (other than the Institute ID):

_____

Assessment completion date:

_____

Assessment Summary Sheet

SAFETY SKILL DEVELOPMENT FOUNDATION

ASSESSMENT SUMMARY SHEET

Qualification Pack – Scaffold Design Engineer

Training Provider: Affiliation No.					**Batch ID:**					**Training Centre Name & Address:**			
Candidate Detail:					**Roll No.: Name:**					**Roll No.: Name:**			
Assessment Summary:													
NOS No.	**Weightage of the NOS**	**Allotted (Marks)**			**Marks Obtained**					**Marks Obtained**			
			Knowledge			**Knowledge**					**Knowledge**		
		Skill (Practical)	**Theory**	**Project**	**Skill (Practical)**	**Theory**	**Project**	**% per Nos**		**Skill (Practical)**	**Theory**	**Project**	**% per Nos**
SSD/VSQ/N0213	17%	40	60	0									
SSD/VSQ/N0214	13%	40	60	0									
SSD/VSQ/N0215	17%	40	60	0									
SSD/VSQ/N0216	13%	40	60	0									
SSD/VSQ/N0217	22%	40	60	0									
SSD/VSQ/N0218	9%	40	60	0									
DGT/VSQ/N0102	9%	30	20	0									
Total Marks	**100**	**270**	**380**	**0**									
		650											
Minimum pass % to qualify	**50%**	50% in each NOS and 50% overall			Pass/Fail								
Assessors Name:										**Signature:**			
Assessing Body Representative Name:										**Signature:**			
Assessment Agency:										**Signature:**			