Assessment Guide

Electrical Safety Supervisor

NSQF Level – 5

Sector: Cross Sectoral

Occupation: Electrical Safety Management

Qualification Pack Code: SSD/VSQ/Q1301

Version: 1.0

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Qualification Structure

To achieve full certification as Electrical Safety Supervisor, 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/N1301	Introduction to Occupational Safety, Health, and Environment (OSHE).	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of occupational health and safety practices, identification of loopholes and gaps in the safety system, fire hazards in the workplace, firefighting methods, and a systematic approach to identifying and correcting potential hazards including fire accidents. The assessment will be based on theory, viva-voice or practical.
002	SSD/VSQ/N1302	Electrical Hazard Identification, Risk Assessment, and Hazard Control	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of identifying electrical hazards in industrial environments, assessing associated risks, and recommending suitable control measures to mitigate them. The assessment will be based on theory, viva- voice or practical.
003	SSD/VSQ/N1303	Electrical Machines & Power Systems	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of electrical machines, power systems, and their safe operation in industrial environments. The assessment will be based on theory, viva-voice or practical.

004	SSD/VSQ/N1304	Electrical Switchgear and Protective Devices	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of electrical switchgear and protective devices used for safeguarding electrical systems and human life. The assessment will be based on theory, viva- voice or practical.
005	SSD/VSQ/N1305	Statutes & Legislative: Safety, Health & Electricity	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of statutory provisions and legislative requirements related to workplace safety, health regulations, and electrical safety standards. The assessment will be based on theory, viva- voice or practical.
006	SSD/VSQ/N1306	Plan & Organize Electrical Emergency Protocols	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of planning and organizing electrical emergency protocols to ensure a safe working environment. 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 Electrical Safety Supervisor at NSQF Level 5. The role is referred to as 'Electrical Safety Supervisor'.

Brief job description: The Electrical Safety Supervisor will responsible to ensure safe operations of power systems. As an electrical supervisor, the professional will demonstrate strong understanding of electrical safety engineering practices, will ensure that all electrical work at the worksite is completed on time and in accordance with the rules and regulations implied in the industry. The Electrical Safety Supervisor is responsible for maintaining at par electrical safety in industries. The professional will contribute in designing and improving safety performance and in meeting the statutory requirements set by the governing bodies.

Personal attributes: The professional should be mentally and professionally fit to take responsibility for compliances of health and safety standards, rules and meet the health and safety standards at workplace with his/her integrity, objectivity, independency, knowledge of law, expression, and code of ethics.

Introduction to assessments:

The assessment will be made based on the competencies required by the trainees to perform the job role of Electrical Safety Supervisor. 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. 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/N1301: Introduction to Occupational Safety, Health, and Environment (OSHE) – Performance/Skill Assessment

The trainee should demonstrate understanding of HSE concepts, accident cost theory, safety responsibilities, and SMART goal setting. They must apply the PDCA cycle, deliver toolbox talks, and conduct induction training. Practical skills should include gas testing with standard sensors, identifying fire types and hazards, and operating firefighting equipment using the PASS technique. Trainees must participate in mock evacuation drills, identify emergency systems, and use SCBA. They should explain safety roles, process safety elements like QRA and LOPA, and demonstrate contractor safety procedures, including permit-to-work and safety reviews.

SSD/VSQ/N1302: Electrical Hazard Identification, Risk Assessment, and Hazard Control – Performance/Skill Assessment

The trainee should demonstrate the ability to identify and define key terms related to electrical safety and explain their relevance in an industrial context. They should able to analyze various categories of electrical hazards and assess the risks involved during electrical maintenance activities, such as short circuits, exposed conductors, arc flash, and contact with live wires. The trainee must also be able to analyze the causes and prevention methods of electrical fires, demonstrating knowledge of fire classes, fire extinguishers suitable for electrical incidents, and control measures to minimize fire risks.

SSD/VSQ/N1303: **Electrical Machines & Power Systems – Performance/Skill Assessment**

The trainee should demonstrate the ability to identify and explain basic electrical engineering terminologies, including voltage, current, resistance, and power. They must be able to distinguish clearly between Alternating Current (AC) and Direct Current (DC), highlighting their characteristics, applications, and behavior in electrical circuits. The trainee should analyze the physiological effects of electricity on the human body and recognize the importance of electrical safety measures to prevent electrical shock and injuries.

SSD/VSQ/N01304: Electrical Switchgear and Protective Devices –Performance/Skill Assessment

The trainee should demonstrate the ability to identify electrical power systems and apply concepts like harmonics and the path of least resistance in circuits. They must understand earth pit construction as per IS3043 and static electricity hazards. The trainee should recognize and explain the use of protective

devices such as circuit breakers, fuses, relays, lightning arresters, and surge protectors. They must identify electrical arcing hazards and perform tests like resistivity testing for earth pits, thermographic hotspot detection, and execute LOTO procedures on busbar systems.

SSD/VSQ/N01305: Statutes & Legislative: Safety, Health & Electricity–Performance/Skill Assessment

The trainee should demonstrate the ability to interpret and apply regulatory requirements under the BOCW Act, including safety measures, committee functions, compliance procedures, inspections, and recordkeeping. They must be able to work out statutory obligations under the Factories Act, including health, safety, welfare provisions, and worker facilities. The trainee should enumerate responsibilities and enforcement measures as per the OSH Code 2020, including both employer and employee roles.

SSD/VSQ/N1306: Plan & Organize Electrical Emergency Protocols–Performance/Skill Assessment

The trainee should demonstrate the ability to plan safety resources, schedules, and measures in alignment with overall work timelines. They must work out organizational hierarchy, ensure effective communication, assign tasks, and coordinate with team members. The trainee should analyze resource collection and provisioning, guide subordinates, and monitor task progress, reporting outcomes effectively.

DGT/VSQ/N0102: Employability Skills

The trainee should demonstrate key employability skills such as communication, teamwork, digital literacy, and professionalism. They must be able to use internet, e-mails, financial transactions methods and Apps. They should be able to communicate and apply for the jobs online.

The 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 The Performance/Skill Assessments

NOS No.	Title	Performance & Knowledge Assessment	Assessment Marks	Min. Passing marks	Assessment Result (Total Passing
SSD/VSQ/N1301	Introduction to Occupational Safety, Health, and Environment (OSHE)	70	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/N1302	Electrical Hazard Identification, Risk Assessment, and Hazard Control	48	100		
SSD/VSQ/N1303	Electrical Machines & Power Systems	48	100		
SSD/VSQ/N1304	Electrical Switchgear and Protective Devices	48	100		
SSD/VSQ/N1305	Statutes & Legislative: Safety, Health & Electricity	66	100		
SSD/VSQ/N1306	Plan & Organize Electrical Emergency Protocols	35	100		
DGT/VSQ/N0102	Employability Skills	44	50		
Total		**360 Min**	**650 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 Electrical Safety Supervisor 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 Electrical Safety Supervisor.

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.

Electrical Safety Supervisor

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/N1301: Introduction to Occupational Safety, Health, and Environment (OSHE)	PC-1 Analyze the concept of Health, Safety and Environment management at the workplace, its importance and the moral, financial and legal reasons for health and safety at the workplace.	4	4	-	-
	PC-2 Apply "Accident Cost-Iceberg" theory of direct and indirect cost incurred from an incident.	4	4	-	-
	PC-3 Identify the employer responsibilities in providing safe working conditions and the employee rights & responsibilities at a workplace.	4	4	-	-

	PC-4 Decipher safety Policy, the general statement of intent in a safety policy, its aim, objects, and “SMART” concept of goal setting	3	3	-	-
	PC-5 Analyze concept of safety audit, audit objective, types, requirement for safety audit at workplace, audit for task, program, activity, project & machinery.	4	4	-	-
	PC-6 Analyze the scope of internal and external audit, reasons & advantages, responsibility of auditor.	3	3	-	-
	PC-7 Analyze first-party, second-party and third-party audits, scope of the compliance audit, program audit & management system audit.	3	3	-	-
	PC-8 Identify role of management in an organization, role of safety supervisor, safety executive, safety officer, safety engineer, and safety manager.	3	3	-	-
	PC-9 Identify fundamentals of process safety, OSHA standards. QRA, LOPA, SIL, FERA, EERA.	4	4	-	-
	PC-10 Identify role of occupier, controller of premise, role & need of contractors in the organization & work permit to contractors, role of	4	4	-	-

	safety committee.				
	PC-11 Analyze the selection prerequisites of a contractor, management of contractors, review meetings, safety committee meetings, method statements, accident reporting, training programs, statutory inspections, permit to work, gaps in contractor safety implementation of contractor safety.	4	4	-	-
	PC-12 Analyze requirement of Plan-Do-Check-Act (PDCA) Cycle in safety management system; understand and analyze “Plan” & “Do” stages and “Check” and “Act” stages of PDCA cycle.	4	4	-	-
	PC-13 Identify the need of training, the contents of induction training & competent persons at the workplace, carry out “Toolbox talk” and “Induction training”..	3	3	-	-
	PC-14 Apply gas testing using – LEL sensor, O2 sensor, H2S sensor, Co Sensor	3	3	-	-
	NOS Total Marks	**50**	**50**	**-**	**-**

SSD/VSQ/N1302: Electrical Hazard Identification, Risk Assessment, and Hazard Control.	PC-1 Identify the definitions in electrical safety.	5	5	-	-
	PC-2 Analyze electrical hazard categories and risks involved in electrical maintenance activities.	5	5	-	-
	PC-3 Interpret Importance of hierarchy of control in maintaining electrical safety.	5	5	-	-
	PC-4 Analyze electrical fires and their control measures	8	7	-	-
	PC-5 Identifies different hazard categories with respect to electrical tools, equipment, and machinery.	7	8	-	-
	PC-6 Interpret correlation of electrical hazards with other hazards such as: Work at height, confined space, working in an excavation, lone working, and slips & trips.	5	5	-	-
	PC-7 Identifies causes and reasons leading to electrical hazards.	5	5	-	-
	PC-8 Identifies circumstances & causes hazards leading to accidents.	5	5	-	-
	PC-9 Recognize tools & equipment handling in electrical systems.	5	5	-	-
	NOS Total Marks	**50**	**50**	**-**	**-**

SSD/VSQ/N1303: Electrical Machines & Power Systems	PC-1 Identify basics terminologies in electrical engineering.	5	5	-	-
	PC-2 Identify the difference between Alternating Current and Direct Current.	5	5	-	-
	PC-3 Analyze effects of electricity in the human body.	5	5	-	-
	PC-4 Identify the role of electric conductors and insulators.	5	5	-	-
	PC-5 Analyze wiring requirements in industries.	5	5	-	-
	PC-6 Interpret electrical induction and the concept of safety clearance.	5	5	-	-
	PC-7 Analyze double insulation principles and its applications	5	5	-	-
	PC-8 Identify overload and short circuit in power lines.	4	4	-	-
	PC-9 Recognise overload and short circuit protection in power lines.	4	4	-	-
	PC-10 Analyze operation of electrical machinery like single phase induction motor, three phase induction motor, DC motor, DC generator, AC generators, synchronous motor, servo motor, step up transformer, step down transformer, instrument transformers etc.	4	4	-	-
	PC- 11 Recognise transmission losses in AC & DC power lines.	3	3	-	-
	NOS Total Marks	**50**	**50**	**-**	**-**

SSD/VSQ/N1304: Electrical Switchgear and Protective Devices.	PC- 1 Identify various electrical power systems.	5	5	-	-
	PC- 2 Apply the concept of harmonics in power lines.	5	5	-	-
	PC -3 Analyze "Path of least resistance in electric circuit".	5	5	-	-
	PC- 4 Analyze construction of Earth pit as per IS3043 and static electricity.	5	5	-	-
	PC-5 Recognise protective devices like circuit breakers, interrupting devices for preventing damage to circuits, equipment, and personnel	5	5	-	-
	PC-6 Analyze lightning arresters, surge protectors, fuses, relays, circuit breakers, reclosers, and other devices and best practices in electrical safety	5	5	-	-
	PC- 7 Identify hazards related to electrical arcing and their boundaries.	5	5	-	-
	PC- 8 Perform resistivity test for earth pit placement.	5	5	-	-
	PC- 9 Perform LOTO on the electrical busbar system.	5	5	-	-
	PC- 10 Identify electrical hotspots with the help of thermography.	5	5	-	-
	NOS Total Marks	**50**	**50**	**-**	**-**

SSD/VSQ/N1305: Statutes & Legislative: Safety, Health & Electricity	PC-1 Work out regulatory requirements of safety & health measures as per BOCW Act.	4	3	-	-
	PC-2 Identify safety committees constitution, functions, compliances, inspections, and record maintenance.	3	4	-	-
	PC-3 Work out statutes, compliances, inspections, reporting process and record maintenance.	3	3	-	-
	PC-4 Work out safety & health measures requirement as per Factory Act at workplace.	4	3	-	-
	PC-5 Work out welfare measures requirement as per Factory Act at the workplace.	3	4	-	-
	PC-6 Work out facilities to be provided for workers & employees at workplace as per the Factory Act.	3	3	-	-
	PC-7 Enumerate the responsibilities as per OSH Code 2020 at workplace.	4	3	-	-
	PC-8 Enumerate enforcement measures of health & safety legislative requirements as per OSH Code 2020 at workplace.	3	4	-	-
	PC-9 Enumerate the Employee's responsibilities as per OSH Code 2020.	3	3	-	-

	PC-10 Work out legal framework for the generation, transmission, distribution, and consumption of electricity in the country.	5	5	-	-
	PC-11 Work out subsequent amendments in the act.	5	5	-	-
	PC-12 Work out the safety requirements as per electricity Acts for individual & organization.	5	5	-	-
	PC-13 Work out the compliance parameters required as electric consumer & distributor as per the Act	5	5	-	-
	NOS Total Marks	**50**	**50**	**-**	**-**
SSD/VSQ/N1306: Plan & Organize Electrical Emergency protocols	PC-1 Plan safety resources, schedules, measures and timelines for readiness as per overall work timelines.	5	5	-	-
	PC-2 Work Out hierarchy of the organization and communication to other team members, co-workers, subordinates & superiors, and coordination with other team members.	5	5	-	-
	PC-3 Identify task and allot to subordinates, supervision and coordination among the team members for readiness in sync with overall task & timelines.	5	5	-	-

	PC-4 Analyze resource collection, provisioning of resources to team members as per task & timelines.	6	6	-	-
	PC-5 Communicate & brief to concerned co-workers, subordinates & superiors, provide guidance to subordinate & co-workers for timely and correct completion.	6	6	-	-
	PC-6 Analyze supervision & monitoring progress of work, reporting the progress & completion, preparation of reports & documents.	6	5	-	-
	PC-7 Set up medical emergency measures, in case of accidents/incidents at the workplace.	6	6	-	-
	PC-8 Set up fire emergency measures as per plans in case of any fire accidents at the workplace.	6	6	-	-
	PC-9 Set up emergency assembly area, evacuation plan, sign boards and guidance.	5	6	-	-
	NOS Total Marks	**50**	**50**	**-**	
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	1	2	-	-
	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	1	2	-	-
	PC- 7 Use basic English for everyday conversation in different contexts, in person and over the telephone	0.5	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	0.5	1	-	-
	PC- 11 Prepare a career	0.5	1	-	-

	development plan with short- and long-term goals, based on aptitude				
	PC- 12 Follow verbal and non-verbal communication etiquette and active listening techniques in various settings	1	1	-	-
	PC- 13 Work collaboratively with others in a team	1	1	-	-
	PC- 14 Communicate and behave appropriately with all genders and PwD	0.5	1	-	-
	PC- 15 Escalate any issues related to sexual harassment at workplace according to POSH Act	0.5	1	-	-
	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	0.5	1	-	-
	PC- 18 Identify common components of salary and compute income, expenses, taxes, investments etc.	0.5	1	-	-
	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	2	-	-
	PC- 21 Use e- mail and social media platforms and virtual collaboration	1	1	-	-

	tools to work effectively				
	PC-22 Use basic features of word processor, spreadsheets, and presentations	1	1	-	-
	PC- 23 Identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	0.5	1	-	-
	PC- 24 Develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	1	1	-	-
	PC- 25 Identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	0.5	1	-	-
	PC- 26 Identify different types of customers	0	0.5	-	-
	PC- 27 Identify and respond to customer requests and needs in a professional manner.	0.5	1	-	-
	PC- 28 Follow appropriate hygiene and grooming standards	0.5	0.5	-	-
	PC- 29 Create a professional Curriculum vitae (Résumé)	0.5	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	1	-	-
	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	0.5	-	-
	PC- 33 Identify apprenticeship opportunities and register for it as per guidelines and requirement	-	0.5	-	-
	Total Marks	**20**	**30**	**-**	**-**
Grand Total		**320**	**330**	**-**	-

Tools, materials, and consumable list

List of Tools and Equipment

Batch Size: 30

No	Tools/Equipment Name	Specifications	Quantity for specified batch size
•	Personal Protective Equipment (PPE)	Nos	15
•	Multimeters	Nos	1
•	Clamp Meters	Nos	1
•	Voltage Testers:	Nos	1
•	Phase Sequence Indicators	Nos	1
•	Non-contact voltage testers	Nos	1
•	Megohmmeters	Nos	1
•	Insulation Resistance Testers	Nos	1
•	Ground Resistance Testers	Nos	1
•	Circuit Breaker Test Sets	Nos	1
•	Emergency Showers and Eyewash Stations	Nos	1
•	Fire Extinguishers	Nos	1
•	First Aid Kits	Nos	1
•	Emergency Response Kits	Nos	1
•	Lockout/Tagout (LOTO) Kits:	Nos	1
•	Circuit Tracers and Analysers	Nos	1
•	Insulated Hand Tools:	Nos	5
•	Portable Generators and Backup Power Supplies	Nos	1
•	Grounding and Bonding Equipment	Nos	1

•	Cable Pullers and Fish Tapes	Nos	1
•	Voltage and Current Calibrators	Nos	1

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. Black/White board
2. Marker
3. Projector
4. Computer with relevant software

Assessment Methods/Tools

SSD/VSQ/N1301 v 1.0: Introduction to Occupational Safety, Health, and Environment (OSHE).

Practical questions **Total Marks:50**

Using a given workplace scenario, draft a SMART safety goal aligned to the safety policy of the organization.

Step 1: Interpret the scenario.
Step 2: Identify relevant safety objectives.
Step 3: Draft SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goals.
Final Output: Well-articulated SMART goal.

B. Multiple choice questions **(5*10=50 marks)**

1	Which of the following is a legal reason for maintaining Health, Safety, and Environment (HSE) management at the workplace?			
	☐	A. Increased productivity	☐	B. Employee satisfaction
	☐	C. Compliance with regulations	☐	D. Reduced absenteeism
2	Which of the following is considered an indirect (hidden) cost of an accident?			
	☐	A. Hospital treatment costs	☐	B. Insurance claims
	☐	C. Damage to tools and equipment	☐	D. Workers' compensation payment
3	What is the main purpose of a Safety Policy in an organization?			
	☐	A.To increase production	☐	B. To define management's commitment to safety
	☐	C. To reduce employee wages	☐	D. To control employee attendance
4	What is a key advantage of an external audit?			
	☐	A. Faster internal coordination	☐	B. Reduced costs
	☐	C. Unbiased evaluation	☐	D. Familiarity with internal processes
5	Which standard is associated with process safety?			
	☐	A. ISO 9001	☐	B.OSHA
	☐	C.HACCP	☐	D.BIS
6	Which stage of PDCA involves reviewing safety performance?			
	☐	A.Plan	☐	B.Do
	☐	C.Check	☐	D.Act
7	Who among the following is responsible for implementing safety policies?			
	☐	A. Safety Supervisor	☐	B. Safety Officer
	☐	C. Safety Engineer	☐	D. All of the above
8	The occupier of a premise is primarily responsible for:			

		A. Submitting financial reports		B. Maintaining the property's tax documents
		C. Ensuring workplace safety		D. Scheduling employee leave
9	The primary purpose of the PDCA cycle in a Safety Management System is to:			
		A. Increase production output		B. Ensure continuous improvement in safety performance
		C. Eliminate all workplace hazards instantly		D. Replace safety regulations
10	Which sensor is used for detecting hydrogen sulfide (H2S)?			
		A. LEL sensor		B. O2 sensor
		C. H2S sensor		D. CO sensor
11	What is the purpose of a toolbox talk?			
		A.Financial planning		B. Safety briefing
		C. Recruitment		D. Lunch planning

SSD/VSQ/N1302 v 1.0 : Electrical Hazard Identification, Categories and Control.

Practical questions **Total Marks:50**

Observe an electrical panel and identify possible causes of electrical hazards.

Step 1: Observe wiring, overload signs, and improper earthing.

Step 2: Note any violations of safety standards.

1. Final Output: List of hazard causes with root cause suggestions.

B. Multiple choice questions **(50marks)**

12	Which term refers to a path provided to safely discharge electric current to the earth?			
		A. Insulation		B. Earthing (Grounding)
		C. Circuit breaker		D.Fuse
13	Which of the following is the most common electrical hazard during maintenance work?			
		A. Noise pollution		B. Electric shock
		C. Poor lighting		D. Slips and trips
14	The hierarchy of control includes elimination, substitution, engineering controls, administrative controls, and PPE.			
		A.True		B.False
		C.Partially True		D.PPE isn't a hierarchy control
15	Which of the following is NOT a control measure for electrical fires?			
		A. Use of circuit breakers		B. Fire-resistant cable
		C. Regular equipment inspection		D. Overloading circuits intentionally
16	Which hazard category is associated with exposed live parts in electrical tools?			
		A. Mechanical hazard		B. Electrical shock hazard

	☐	C. Ergonomic hazard	☐	D. Noise hazard
17	Assertion: Electrical hazards can be related to other physical hazards like slips and trips. Reason: Electrical systems are usually grounded and maintained properly. Options:			
	☐	A. Both A and R are true and R is the correct explanation	☐	B. Both A and R are true but R is not the correct explanation
	☐	C. A is true but R is false	☐	D. A is false but R is true
18	Which of the following is a common cause of electrical hazards?			
	☐	A. Using equipment as per manual	☐	B. Proper insulation
	☐	C. Damaged wires and exposed circuits	☐	D. Having qualified personnel only
19	Which tool would you use to assess the risk of electrical fire in a new workplace?			
	☐	A. Fire extinguisher	☐	B. Risk assessment matrix
	☐	C. Safety boots	☐	D. Electrical meter
20	Which equipment is commonly used to safely handle live electrical systems?			
	☐	A. Plastic hammer	☐	B. Wooden ladder
	☐	C. Insulated gloves	☐	D. Steel wrench
21	Overheating of electrical equipment mainly creates which type of hazard?			
	☐	A. Fire hazard	☐	B. Chemical hazard
	☐	C. Radiation hazard	☐	D. Slip hazard

Assessment Methods/Tools

SSD/VSQ/N1303 v 1.0:Electrical Machines & Power Systems

Practical questions **Total Marks:50**

Play the role of a supervisor explaining the differences between AC and DC to a new technician and their relevance in different work scenarios.

Step 1: Clearly describe AC and DC; Step 2: Highlight key differences; Step 3: Provide workplace examples

B. Multiple choice questions **(5*10=50 marks)**

22	Which of the following is a basic electrical term?			
	☐	A. Resistance	☐	B. Gear ratio
	☐	C. Torque	☐	D. Friction
23	Which of the following is a common source of DC power?			
	☐	A. Alternator	☐	B. Power grid supply
	☐	C. Battery	☐	D. Transformer
24	Electric shock can occur even if the body is not grounded. (True/False)			

		A.True		B. False
25	Which of the following is an example of a good conductor?			
		A. Rubber		B. Copper
		C. Plastic		D. Glass
26	Match the wiring requirements: A. Industrial wiring - 1. High durability B. Residential wiring - 2. Flexibility C. Control wiring - 3. Specific labeling			
		A. A-1, B-2, C-3		B. A-3, B-2, C-1
		C. A-1, B-3, C-2		D. A-2, B-1, C-3
27	Electrical induction can occur mainly due to:			
		A. Mechanical vibration		B. Magnetic or electric fields
		C. High temperature		D. Chemical reactions
28	Double insulation is unnecessary if the device is grounded. (True/False)			
		A. True		B. False
29	What is the cause of overload in power lines?			
		A. Low resistance		B. Excessive current
		C. Short circuit		D. High voltage
30	Assertion: Short circuit protection is necessary to prevent equipment damage. Reason: Short circuit causes high current flow			
		A. Both A and R are true, and R is the correct explanation of A		B. Both A and R are true, but R is not the correct explanation of A
		C. A is true, R is false		D. A is false, R is true
31	Which of these is not a type of electrical motor?			
		A. DC motor		B. Hydraulic motor
		C. Induction motor		D. Servo motor

SSD/VSQ/N1304 v 1.0: Electrical Switchgear and Protective Devices

A. Practical questions **Total Marks:50**

Perform a role play where you explain Earth pit construction as per IS3043 to a junior technician.

1. **Explains IS3043 specs, sequence, role of grounding materials – 5 marks**

B. Multiple choice questions **(50 marks)**

32	Which of the following is an example of an electrical power system?			
		A. Hydraulic turbine		B. HVAC system
		C. Distribution grid		D. Pneumatic system

33	Harmonics in power lines can cause distortion and reduce efficiency. (True/False)			
	☐	A. True	☐	B. False
34	Assertion: Electricity follows the path of least resistance. Reason: It is due to higher conductivity in that path.			
	☐	A. Both A and R are true, and R is the correct explanation of A	☐	B. Both A and R are true, but R is not the correct explanation of A
	☐	C. A is true, R is false	☐	D. A is false, R is true
35	Which IS code relates to Earth pit construction?			
	☐	A. IS456	☐	B. IS800
	☐	C. IS3043	☐	D. IS875
36	Which protective device is designed to protect people from electric shock due to leakage current?			
	☐	A. Fuse	☐	B. Circuit breaker
	☐	C. Residual Current Device (RCD) / ELCB	☐	D. Transformer
37	What is the main purpose of a lightning arrester?			
	☐	A. To interrupt overload current automatically	☐	B. To protect electrical equipment from high-voltage lightning strikes
	☐	C. To regulate voltage supply	☐	D. To store electrical energy
38	Which of the following is a hazard of electrical arcing?			
	☐	A. Cooling of circuits	☐	B. Reduced resistance
	☐	C. Arc flash injuries	☐	D. Decrease in current
39	Resistivity tests are used to determine suitability for earth pit placement. (True/False)			
	☐	A. True	☐	B. False

40	What is the first step in LOTO (Lock Out Tag Out) procedure?			
	☐	A. Tagging the equipment	☐	B. Shutting down the system
	☐	C. Testing the isolation	☐	D. Locking the switches
41	Which device is used to identify electrical hotspots?			
	☐	A. Multimeter	☐	B. Thermography camera
	☐	C. Clamp meter	☐	D. Circuit tracer

SSD/VSQ/N1305 v 1.0: Statutes & Legislative : Safety, Health & Electricity

A. Practical questions **Total Marks:50**

Perform a role play where you explain Earth pit construction as per IS3043 to a junior technician.

Step 1: Review case

Step 2: Identify committee structure and roles

Step 3: Note compliance steps

Step 4: Observe record keeping

Final Outcome: Accurate observation and understanding of safety committee operations

B. Multiple choice questions **(50 marks)**

42	What is the primary objective of the BoCW Act, 1996?			
	☐	A. To regulate electricity usage	☐	B. To manage worker compensation
	☐	C. To ensure safety and health of building and construction workers	☐	D. To supervise industrial machines
43	What is the primary purpose of a safety committee in an organization?			
	☐	A. To increase production output	☐	B. To ensure workplace safety and compliance with regulations
	☐	C. To hire and fire employees	☐	D. To manage payroll
44	Statutory inspections and compliance reports are not necessary under the BoCW Act. (True/False)			
	☐	A. True	☐	B. False
45	Which of the following is a requirement under the Factory Act for worker safety?			
	☐	A. Providing free housing	☐	B. Conducting annual company outings
	☐	C. Maintaining safe working conditions	☐	D. Offering shares to workers

46	The main purpose of welfare measures under the Factory Act is to:			
	☐	A. Increase production speed	☐	B. Promote health, safety, and comfort of workers
	☐	C. Reduce working hours only	☐	D. Provide entertainment facilities
47	Factory Act mandates provision of facilities like drinking water and sanitation for employees. (True/False)			
	☐	A. True	☐	B. False
48	Under the OSH Code 2020, whose responsibility is it to maintain workplace safety?			
	☐	A. Visitors	☐	B. Customers
	☐	C. Employers	☐	D. Investors
49	The Electricity Act 2003 regulates which of the following?			
	☐	A. Import of electrical goods	☐	B. Employment of electricians
	☐	C. Generation, transmission and distribution of electricity	☐	D. Pricing of electrical appliances
50	What should an individual do to stay safe while using electricity?			
	☐	A. Touch live wires	☐	B. Wear insulated gloves
	☐	C. Overload the socket	☐	D. Ignore safety signs
51	Which compliance is required from electric distributors under the Act?			
	☐	A. Selling at fixed price	☐	B. Providing yearly reports only
	☐	C. Adhering to safety codes and grid standard	☐	D. Hiring only government electricians

SSD/VSQ/N1306 v 1.0: Plan & Organize Electrical Emergency protocols

A. Practical questions **Total Marks:50**

List and assign tasks to subordinates for an emergency readiness drill, showing how task distribution is managed.

Step 1: Identify all tasks

Step 2: Allocate based on roles

Step 3: Document assignments

Final Outcome: Task list matched with timeline

B. Multiple choice questions **(50 marks)**

52	In a company hierarchy, who usually has the highest authority?			
	☐	A. Manager	☐	B. Team Leader

	☐	C. CEO	☐	D. Intern
53	True or False: Task identification and delegation must align with the overall work timeline. (True/False)			
	☐	A. True	☐	B. False
54	The main purpose of briefing co-workers, subordinates, and superiors is to:			
	☐	A. Avoid doing any work yourself	☐	B. Ensure timely and correct completion of tasks
	☐	C. Ensure timely and correct completion of tasks	☐	D. Record attendance only
55	Which of the following is NOT typically included while planning electrical safety resources?			
	☐	A. Timeline	☐	B. Budget allocation
	☐	C. Astrological consultation	☐	D. Manpower planning
56	Which of the following is the first step in resource provisioning?			
	☐	A. Collection of resources	☐	B. Evaluation of reports
	☐	C. Fire drill	☐	D. Budget Sanction
57	Assertion (A): Monitoring work progress is critical for safety. Reason (R): It helps in identifying delays and rectifying errors			
	☐	A. Both A and R are true and R is the correct explanation of A	☐	B. Both A and R are true but R is not the correct explanation of A
	☐	C. A is true, R is false	☐	D. A is false, R is true
58	What is the first step in setting up a workplace medical emergency plan?			
	☐	A. Conducting drills	☐	B. Purchasing fire extinguishers
	☐	C. Identifying medical facilities	☐	D. Creating evacuation maps
59	The main goal of setting up fire emergency measures is to:			
	☐	A. Prevent panic only	☐	B. Ensure safety and minimize damage during a fire
	☐	C. Delay reporting the fire	☐	D. Continue work without interruption
60	True or False: Emergency assembly areas must have clear signboards and guidance paths. (True/False)			
	☐	A. True	☐	B. False
61	When planning safety measures, it is important to consider:			
	☐	A. Overall work timelines	☐	B. Personal preferences only

	☐	C. Random safety rules	☐	D. Ignoring deadlines

DGT/VSQ/N0102: Employability Skills	**Total Marks:50**
A. Practical questions	**Total Marks:30**

List the key components of a basic CV and write brief answers to two common job interview questions - Q1: Tell us briefly about yourself.

Q2: Why should we hire you?

Step 1: Components of a basic CV:

1. Name and Contact Information

2. Career Objective

3.Educational Qualifications

4. Skills

5. Internship/Project Experience (if any)

6. Hobbies and Interests

Step 2: Interview Answers:

A1: I'm a dedicated and hardworking individual with strong communication skills and a keen interest in learning and contributing to team success.

A2: I am a quick learner, adapt well to new environments, and committed to delivering quality work, making me a valuable team member.

B. Multiple choice questions **(20 marks)**

62	Riya finds a lost wallet on the road containing money and an ID card. Instead of keeping it, she submits it to the nearest police station. Which constitutional value and personal ethic does this action BEST represent?			
	☐	A. Freedom of expression and confidence	☐	B. Honesty, integrity, and responsibility towards society
	☐	C. Right to equality and leadership	☐	D. Obedience to authority and discipline
63	Aarav realizes that he gets distracted easily while studying. He decides to make a study timetable, keeps his phone away during study hours, and reviews his progress every week. Which 21st Century skills is Aarav MOST clearly demonstrating?			
	☐	A. Social and cultural awareness	☐	B. Creative thinking and emotional expression
	☐	C. Self-awareness, time management, and learning to learn	☐	D. Leadership and public speaking
64	You receive the following email from your office manager: "Dear Team,			

	Please submit your weekly reports by 5 PM on Friday. Make sure all data is updated and any pending approvals are included. Late submissions may affect project timelines. Best regards, Manager" What is the main instruction in this email?			
	☐	A. Submit weekly reports by 5 PM on Friday.	☐	B. Submit weekly reports on Monday.
	☐	C. Only update the data in reports if needed.	☐	D. Approvals are not necessary for submission.
65	Sarah wants to create a career development plan. She knows she is good at problem-solving and enjoys working with technology. Which of the following is the best example of a short-term goal for her career plan?			
	☐	A. Become a senior software engineer in 10 years.	☐	B. Complete a coding course within the next 6 months.
	☐	C. Retire from her job comfortably in 30 years.	☐	D.Buy a house after five years.

Assessment Evidence Form

Trainee name: **Trainee roll number:**

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

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).

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 Electrical Safety Supervisor

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 – Traffic Safety Marshal

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			
		Skill (Practical)	Knowledge		Skill (Practical)	Knowledge			Skill (Practical)	Knowledge		
			Theory	Project		Theory	Project	% per Nos		Theory	Project	% per Nos
SSD/VSQ/N1301	20%	50	50	0								
SSD/VSQ/N1302	15%	50	50	0								
SSD/VSQ/N1303	15%	50	50	0								
SSD/VSQ/N1304	15%	50	50	0								
SSD/VSQ/N1305	10%	50	50	0								
SSD/VSQ/N1306	10%	50	50	0								
DGT/VSQ/N0102 (60 Hours)	10%	30	20	0								
Total Marks	**100**	**330**	**320**	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:**