



## Assessment Guide

Safety Executive (OSHE)

NSQF Level – 5

*Sector: Cross Sectoral*

*Occupation: Occupational Safety Health & Environment (OSHE) Engineering & Management*

*Qualification Pack Code: SSD/VSQ/Q0103*

*Version: 1.0*



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## Qualification Structure

To achieve full certification as Safety Executive (OSHE), trainees must complete all nine units (NOS) and pass assessments. The assessments will comprise of theory & practical tests.

Sl. no	Unit No. (NOS)	Title	Assessment method
001	SSD/VSQ/N0106	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/N0107	Fire Safety, firefighting equipment, and fire evacuation plan	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of fire safety measures, including the identification of fire hazards, classification of different types/classes of fire, and appropriate firefighting techniques suitable for various workplace environments such as offices and industrial units. The assessment will be based on theory, viva-voice or practical.



003	SSD/VSQ/N0111	Accident Prevention Methodologies.	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of accident prevention techniques, practical application of safety principles, and implementation of root cause analysis methodologies to prevent recurrence of workplace incidents. The assessment will be based on theory, viva- voice or practical.
004	SSD/VSQ/N0108	Hazard Identification, Categories and Control	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of hazard identification, classification of hazards, severity analysis, and risk rating methodologies in the workplace. The assessment will be based on theory, viva-voice or practical.
005	SSD/VSQ/N0112	Pollution & Environment Management, Global warming, and sustainability	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of environmental impacts of construction and industrial processes, understanding pollution types, and applying sustainable practices. The assessment will be based on theory, viva- voice or practical.



006	SSD/VSQ/N0109	Statutes & Legislative requirements in Health & Safety	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of statutory provisions, legal frameworks, and regulatory compliance concerning health and safety as mandated by the Government of India. The assessment will be based on theory, viva- voice or practical.
007	SSD/VSQ/N0110	Health, Hygiene, Environment & Psychological Health	The assessment will be made for the competencies required by the trainee on skills, knowledge & understanding of skills related to maintaining physical health, workplace hygiene, environmental quality, and psychological well-being of workers at the site. The assessment will be based on theory, viva- voice or practical.
008	SSD/VSQ/N0104	Plan, Organize and Emergency protocols	The assessment will be made for the competencies required by the trainee on skills, knowledge, and understanding of planning and organizing work activities with a focus on ensuring a safe working environment and implementing emergency protocols. The assessment will be based on theory, viva-voice, or practical.



009	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.
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## Guidance for assessors

This qualification provides the performance criteria, skills and knowledge required to perform for the job role of Safety Executive at NSQF Level 5. The role is referred to as ‘Safety Executive (OSHE).’

**Brief job description:** Safety Executive (OSHE) is responsible for the implementation of health and safety policy, ensuring the organization health and safety compliance as per the local or national legislative requirements. Identify workplace hazards and suggest actionable controls for mitigating the hazard, assist and advise the management in maintaining safe working conditions in the organization promote positive safety culture and escalate grievances related to improper or unsafe working conditions.

**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 the workplace with his/her integrity, objectivity, independence, 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 Safety Executive (OSHE). 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/N0106: 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/N0107: Fire Safety, firefighting equipment, and fire evacuation plan – Performance/Skill Assessment**

The trainee should demonstrate a fundamental understanding of fire-related terminology, types of combustible materials, combustion processes, and heat transmission methods. They must explain the fire triangle, fire classifications, and common causes of fire, along with identifying the four stages of fire development. The trainee should be able to suggest preventive measures by controlling fuel, ignition, and oxygen sources. They must demonstrate understanding of evacuation procedures including escape routes, signage, fire marshal duties, and execute fire drills for evacuation and firefighting scenarios.

### **SSD/VSQ/N0111: Accident Prevention Methodologies– Performance/Skill Assessment**

The trainee should demonstrate a fundamental understanding of accident-related terminology including incident, accident, injury, lost time injury, unsafe acts and conditions, dangerous occurrences, hazards, errors, and near misses. They must be able to explain various accident causation theories such as Heinrich's Domino Theory, the 300-29-1 Model, Ferrell's Human Factor Model, Petersen's Accident/Incident Model, and Reason's Swiss Cheese Model, and apply them to workplace scenarios.



## **SSD/VSQ/N0108: Hazard Identification, Categories and Control – Performance/Skill Assessment**

The trainee should demonstrate a clear understanding of basic safety terminology including hazards, unsafe acts and conditions, incidents, accidents, near misses, and types of injuries. They must identify the risks introduced by PPEs and recognize various safety signs and signals. The trainee must be able to categorize hazards related to electricity, fire, tools, machinery, work at height, confined spaces, excavations, lone working, and slips and trips, and suggest appropriate control measures. They should also assess hazards from workforce movement, vehicles, hazardous substances, manual handling, noise, vibration, radiation, psychological factors, and workplace violence.

## **SSD/VSQ/N0112: Pollution & Environment Management, Global warming, and sustainability.**

The trainee should demonstrate a clear understanding of various types of pollution—air, water, land, and noise—including their sources, impacts on health and environment, and applicable control measures. They must explain different waste types, disposal methods, and the functioning of effluent treatment plants. The assessment should evaluate the trainee's familiarity with hazardous waste management practices and the application of the 6R principles: Rethink, Refuse, Reduce, Reuse, Recycle, and Repair.

## **SSD/VSQ/N0109: Statutes & Legislative requirements in Health & Safety – Performance/Skill Assessment**

The trainee should demonstrate the ability to interpret and apply statutory provisions related to occupational health, safety, and environmental compliance. This includes regulatory understanding and application of the BOCW Act, Factories Act, and OSH Code 2020, along with OSHA requirements.

## **SSD/VSQ/N0110: Health, Hygiene, Environment & Psychological Health– Performance/Skill Assessment**

The trainee should demonstrate the ability to identify health risks at the workplace arising from poor hygiene, sanitation, and environmental conditions. They must assess the requirements for maintaining health and hygiene to prevent health-related issues among workers and prepare appropriate measures to promote well-being.



## **SSD/VSQ/N0104: Plan, Organize and Emergency protocols– Performance/Skill Assessment**

The trainee should demonstrate the ability to plan safety resources, allocate tasks, and coordinate effectively with the team. They must organize and monitor work progress, communicate clearly, and report status accurately. For emergency preparedness, the trainee should set up medical and fire response protocols, identify evacuation routes, and ensure emergency signage and assembly points are in place.

## **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
SSD/VSQ/N0106	Introduction to Occupational Safety, Health, and Environment (OSHE) Management.	34	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/N0107	Fire Safety, firefighting equipment, and fire evacuation plan	41	100		
SSD/VSQ/N0111	Accident Prevention Methodologies	26	100		
SSD/VSQ/N0108	Hazard Identification, Categories and Control	60	100		

SSD/VSQ/N0112	Pollution & Environment Management, Global warming, and sustainability.	26	100		
SSD/VSQ/N0109	Statutes & Legislative requirements in Health & Safety	75	100		
SSD/VSQ/N0110	Health, Hygiene, Environment & Psychological Health	30	100		
SSD/VSQ/N0104	Plan, Organize and Emergency protocols	30	100		
DGT/VSQ/N0102	Employability Skills	38	50		
<b>Total</b>		<b>360 Min</b>	<b>850 Marks</b>		

## 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 Safety Executive (OSHE) 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 Safety Executive (OSHE).

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.

## Practical Observation Checklist

Safety Executive (OSHE)					
1. Learner Name: _____ 2. Enrolment No: _____ 3. Centre: _____					
<b>Guidance to assessors:</b>  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/N0106 Introduction to Occupational Safety, Health, and Environment (OSHE)	PC-1 Understand the concept of Health, Safety and Environment management at the workplace, its importance and the moral, financial and legal reason for health and safety at the workplace.	4	4	-	-
	PC-2 Understand "Accident Cost-Iceberg" theory of direct and indirect cost incurred from an incident.	4	4	-	-
	PC-3 Understand the employer responsibilities in providing safe working conditions and the employee rights & responsibilities	4	4	-	-



	at a workplace, safety culture, its indicators and role of International Labor Organization in health & safety.				
	PC-4 Understand safety Policy, the general statement of intent in a safety policy, its aim, objectives and “SMART” concept of goal setting.	3	3	-	-
	PC-5 Understand concept of safety audit, audit objective, types, requirement for safety audit at workplace, audit for a task, program, activity, project & machinery	4	4	-	-
	PC-6 Understand the scope of internal and external audit, reasons & advantages, responsibility of auditor.	3	3	-	-
	PC-7 Understand first-party, second-party and third-party audits, scope of the compliance audit, program audit & management system audit.	3	3	-	-
	PC-8 Understand the role of management in an organization, role of safety supervisor, safety executive, safety officer, safety engineer, and safety manager.	3	3	-	-
	PC-9 Understand fundamentals of process safety, OSHA standards. QRA, LOPA, SIL, FERA, EERA.	4	4	-	-



	PC-10 Understand the role of occupier, controller of premise, role & need of contractors in the organization & work permit to contractors, role of safety committee.	4	4	-	-
	PC-11 Understand 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 Understand the 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 Understand 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 Learn gas testing using – LEL sensor, O2 sensor, H2S sensor, Co Sensor.	3	3	-	-



	NOS Total Marks	50	50	-	-
<b>SSD/VSQ/N0107:</b> <b>Fire Safety, firefighting equipment and fire evacuation plan.</b>	PC-1 Understand basic definitions- Flammable liquids, Combustible matter/liquids, Combustible gases, combustion, oxygen percentage in air, exothermic and endothermic reactions, flash point and fire point and transmission of heat by conduction, convection, and radiation.	5	5	-	-
	PC-2 Understand the Fire triangle and classification fire. Understand the common reason for fire accidents.	5	5	-	-
	PC-3 Understand the four stages of fire- incipient, growth, fully developed and decay.	5	5	-	-
	PC-4 Preventing fire and spread by controlling fuel source, ignition source control and oxygen control.	5	5	-	-
	PC-5 Understand different types of extinguishing media-water, foam, dry chemical powder, carbon dioxide.	3	2	-	-
	PC-6 Understand types of fire-fighting equipment, its principle of operation, components in different fire extinguisher.	2	3	-	-
	PC-7. Learn and perform extinguishing of fire using PASS	3	2	-	-



	technique & operation of fire hydrants.				
	PC-8 Implement the placement of fire extinguisher at workplace and learn maintenance of fire extinguisher with the help of checklist.	2	3	-	-
	PC-9 Understand the use of smoke detectors, fire alarm, emergency lighting, flashing light, sprinklers, and pressure requirements in fire hydrants.	4	4	-	-
	PC-10 Identify new technological interventions in fire safety like water mist system, online hydrant pressure monitoring, wireless fire detection system etc.	3	3	-	-
	PC-11 Understanding use of PPE's in fire safety – Helmet, turnout gear, gloves, boots, SCBA (Self-contained breathing apparatus) and use of SCBA.	3	3	-	-
	PC-12 Understand the requirements of emergency evacuation – Escape route as per IS1644.	4	4	-	-
	PC-13 Understand Fire door, emergency directional signages, assembly point, evacuation, evacuation of differently abled,	3	3	-	-



	evacuation procedure, role of “Fire Marshals”.				
	PC-14 Carry out fire drills on emergency evacuation and firefighting equipment.	3	3	-	-
	<b>NOS Total Marks</b>	<b>50</b>	<b>50</b>	<b>-</b>	<b>-</b>
<b>SSD/VSQ/N0111:</b> <b>Accident</b> <b>Prevention</b> <b>Methodologies.</b>	PC-1 Understand basic definitions- incident, accident, Injury, lost time injury, unsafe condition, unsafe Acts, dangerous occurrences, hazards, error, near miss.	5	5	-	-
	PC-2 Understand theories of accident causation- Heinrich’s Domino theory”, “Heinrich 300-29-1 model, “” Ferrell's Human Factor Model”, “Petersen’s Accident/Incident Model ” and" Reason’s Swiss Cheese Model”.	5	5	-	-
	PC-3 Calculate “Frequency rate & Incident rate”. Calculate “Lost time case rate.”	5	5	-	-
	PC-4 Calculate “DART rate”. Calculate “Severity rate.”	5	5	-	-
	PC-5 Understand “Fault tree analysis” and “Event tree analysis.	5	5	-	-
	PC-6 Understand and carry out “HAZOP- Hazard, operability analysis” and “Job safety analysis”.	5	5	-	-
	PC-7 Understand “Hazard Identification and risk	5	5	-	-



	assessment”.				
	PC-8 Learn the hierarchy of controls, Importance of hierarchy of control & steps in hierarchy of control	5	5	-	-
	PC-9 Understand Maslow’s theory of Hierarchical Needs, Herzberg’s two-factor theory and McClelland’s theory of needs	5	5	-	-
	PC-10 Vroom’s Theory of Expectancy, McGregor’s theory X and theory Y and Alderfer’s ERG theory	5	5	-	-
	<b>NOS Total Marks</b>	<b>50</b>	<b>50</b>	<b>-</b>	<b>-</b>
<b>SSD/VSQ/N0108:</b> <b>Hazard Identification, Categories and Control</b>	PC-1 Understand the basic definitions: Hazards, unsafe conditions & acts, incidents & accidents; fatal, non-fatal, near miss incidents & accidents; lost time injury & first aid injury.	5	5	-	-
	PC-2 Understand hazard categories and risks introduced by PPEs.	3	3	-	-
	PC-3 Know the different types of safety signs and signals.	2	2	-	-
	PC-4 Understand the hierarchy of controls in safety.	4	2	-	-
	PC-5 Understanding Importance of each hierarchy of control.	4	3	-	-



	PC-6 Understanding the steps in the hierarchy of control.	4	3	-	-
	PC-7 Understand different hazard categories & control: Electricity and Fire.	4	4	-	-
	PC-8 Understand different hazard categories & control: Tools, equipment and machinery.	4	4	-	-
	PC-9 Understand different hazard categories & control: Health and workplace hazard - Work at height, confined space, working in an excavation, lone working and slips & trips.	4	4	-	-
	PC-10 Understand different hazard categories & control: Movement of workforce, Work related driving and vehicles at workplace.	4	4	-	-
	PC-11 Understand different hazard categories & control: Hazardous substances.	4	4	-	-
	PC-12 Understand different hazard categories & control: Musculoskeletal disorders, manual handling, and load handling equipment.	4	4	-	-
	PC-13 Understand different hazard categories & control: Noise, vibration, radiation, mental ill-	2	4	-	-



	health, violence at work, substance abuse at workplace.				
	PC-14 Understand different hazard categories & control: Lifting and Rigging hazards and control.	2	4	-	-
	<b>NOS Total Marks</b>	<b>50</b>	<b>50</b>	<b>-</b>	<b>-</b>
<b>SSD/VSQ/N0112:</b> <b>Pollution &amp; Environment Management, Global warming, and sustainability.</b>	PC-1 Understand environment & atmospheric pollution, water pollution, land pollution, noise pollution, air quality, ill effects, and control.	10	10	-	-
	PC-2 Understand types of waste, its disposal techniques, and concepts of effluent treatment plants.	10	10	-	-
	PC-3 Hazardous waste management & 6R's.	5	5	-	-
	PC-4 Understand the regulatory requirements of Central Pollution Control Board & State Pollution Control Board and Environment Protection Act, 1986" & KYOTO protocol.	5	5	-	-
	PC-5 Learn about remote sensing, air monitoring, biological monitoring, soil monitoring and water monitoring.	5	5	-	-



	PC-6 Understand EIA- Environmental impact assessment and LCI- Life cycle Impact assessment.	5	5	-	-
	PC-7 Understand global warming and climate change, greenhouse gasses & greenhouse effect, carbon cycle, carbon footprints, carbon neutrality & Carbon credits.	4	4	-	-
	PC-8 Understand ozone layer, ozone layer depletion, elements affecting ozone layer, acid rain, wet deposition, dry deposition, and its factors.	3	3	-	-
	PC-9 Understand the meaning of Eco-friendly, energy conservation methods using solar, hydro, wind, biomass, water and harvesting.	3	3	-	-
	<b>NOS Total Marks</b>	<b>50</b>	<b>50</b>	<b>-</b>	<b>-</b>
<b>SSD/VSQ/N0109: Statutes &amp; Legislative requirements in Health &amp; Safety</b>	PC-1 Apply regulatory requirements on safety, health & environment compliance as per BOCW Act 1996.	4	4	-	-
	PC-2 Apply regulatory requirements on safety, health & environment compliance as per Factories Act, 1948.	4	4	-	-



	PC-3 Apply regulatory requirements on safety, health & environment compliance as per OSH Code 2020 & Occupational Safety & Health Administration (OSHA) compliance requirements.	4	4	-	-
	PC-4 Apply regulatory requirements as per Environment Protection Act, 1986 & ILO Guidelines related to EHS.	3	3	-	-
	PC-5 Apply regulatory requirements and compliance as per Oil Industry Safety Directorate (OSID) Guidelines	4	4	-	-
	PC-6 Apply regulatory requirements and compliance as per Mines Vocational Training Rules – DGMS	4	4	-	-
	PC-7 Apply Electricity Act 2010 & 2003	3	3	-	-
	PC-8 Apply safety compliance requirement as per National Building Code (NBC) – 2016	3	3	-	-
	PC-9 Apply regulatory requirements and compliance as per National Fire Protection Association regulations.	4	4	-	-
	PC-10 Apply regulatory requirements and compliance as per Petroleum & Explosive Safety Organization (PESO) and Explosive Act 1884.	3	3	-	-



	PC-11 Apply safety requirements as per Gas Cylinders Rule 2016	3	3	-	-
	PC-12 Apply regulatory requirements and compliance as per The Boilers Act 1923	2	2	-	-
	PC-13 Apply the Workmen Compensation Act 1923 & Employee State Insurance Act 1948 and related compliance.	3	3	-	-
	PC-14 Apply regulatory compliances needed as per Motor vehicle Act 1988	3	3	-	-
	PC-15 Apply requirements of First Aid at workplaces and provide training on first aid.	3	3	-	-
	<b>NOS Total Marks</b>	<b>50</b>	<b>50</b>	<b>-</b>	<b>-</b>
<b>SSD/VSQ/N0110: Health, Hygiene, Environment &amp; Psychological Health</b>	PC-1 Understand of the hazards and risks at the workplace for the health of workers & employees due to hygiene, sanitation and working environment.	6	6	-	-
	PC-2 Evaluate the requirements of health, hygiene & sanitation at work place to mitigate any risk to health of workers & employees at work site.	6	6	-	-
	PC-3 Prepare list of measures to be ensured for good health, hygiene of	6	5	-	-



	employees/ workers at the workplace.				
	PC-4 Plan & ensure safe water hygiene, food hygiene and personal hygiene arrangements.	6	6	-	-
	PC-5 Plan & ensure measures for human waste management, solid waste management, water waste management at work site.	6	6	-	-
	PC-6 Plan & ensure housing hygiene, work hygiene, cleanliness and ventilations at work place.	5	6	-	-
	PC-7 Plan & ensure availability of medical facilities near to the workplace.	5	5	-	-
	PC-8 Plan & ensure adequate policy, briefing & clarity on safety provisions at work place.	5	5	-	-
	PC-9 Plan & ensure education facilities for children of workers and entertainment & communication facilities for all.	5	5	-	-
	<b>NOS Total Marks</b>	<b>50</b>	<b>50</b>	<b>-</b>	<b>-</b>



<b>SSD/VSQ/N0104:</b> <b>Plan,</b> <b>Organize and</b> <b>Emergency</b> <b>protocols</b>	PC-1 Planning of safety resources, schedules, measures and timelines for readiness as per overall work timelines.	5	5	-	-
	PC-2 Communication to other team members, co-workers, subordinates & superiors and coordination with other team members.	5	5	-	-
	PC-3 Task identification and allotment to subordinates, supervision and coordination among the team members for readiness in sync with overall task & timelines.	5	5	-	-
	PC-4 Resource collection, provisioning of resources to team members as per task & timelines.	6	6	-	-
	PC-5 Understanding hierarchy of the organization and communicating & brief to concerned co-workers, subordinates & superiors, provide guidance to subordinate & co-workers for timely and correct completion.	6	6	-	-
	PC-6 Supervision & monitoring progress of work, reporting the progress & completion, preparation	6	5	-	-



	of reports & documents.				
	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	-	-
	<b>NOS Total Marks</b>	<b>50</b>	<b>50</b>	<b>-</b>	<b>-</b>
<b>DGT/VSQ/N0102:</b> <b>Employability Skills</b>	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	1.5	1.5	-	-

	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	1.5	1.5	-	-
	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	0.5	0.5	-	-
	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	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	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 different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	1	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	1	1	-	-
	PC- 26 Identify different 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	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	-	-	-



	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 guidelines and requirement	-	0.5	-	-
	<b>Total Marks</b>	<b>25</b>	<b>25</b>	<b>-</b>	<b>-</b>
<b>Grand Total</b>		<b>425</b>	<b>425</b>	<b>-</b>	<b>-</b>

## Tools, materials, and consumable list

List of Tools and Equipment

Batch Size: 30

S. No	Tools/Equipment Name	Specifications	Quantity for specified Batch size
1	Safety goggles	Nos	15
2	Full face shield	Nos	10
3	Leather gloves	Nos	9
4	Puncture resistant gloves	Nos	9
5	Chemical resistant gloves	Nos	9
6	Electrically insulated latex gloves	Nos	9
7	Safety helmets/hard hats	Nos	15
8	Ear plugs	Nos	15
9	Ear muffs	Nos	15
10	Safety shoes	Nos	15
11	Safety gumboots	Nos	15
12	High visibility jackets	Nos	15
13	N95 masks	Nos	15
14	Double filter half face mask	Nos	5
15	Double filter full face mask	Nos	5
16	SCBA – Self-contained breathing apparatus	Nos	1
17	Safety harness	Nos	15
18	Lanyard	Nos	15



19	Fall arrestor	Nos	15
20	CO2 Fire extinguisher	Nos	25
21	Dry Chemical Powder Fire extinguisher	Nos	25
22	Fire hydrant system	Nos	1
23	Multiple gas detector	Nos	1
24	TDS Meter	Nos	1
	<p>Classroom Aids</p> <p>The aids required to conduct sessions in the classroom are:</p> <ol style="list-style-type: none"><li>1. Blackboard</li><li>2. Marker</li><li>3. Projector</li><li>4. Working Models</li><li>5. Open yard for practical</li></ol>		

## Assessment Method/Tools

### SSD/VSQ/N0106: Introduction to Occupational Safety, Health, and Environment (OSHE)

#### A. Practical Activities/Questions

**Total Marks:50**

A worker slips on an oily surface near the loading dock and sprains his ankle. Perform a role play demonstrating how to document the incident as the Safety Executive.

#### Steps

1. Collect Incident Details: Record date, time, exact location, people involved, and a brief description of what happened.
2. Interview Witnesses: Speak with any nearby workers or supervisors to gather additional facts and viewpoints.
3. Identify Root Cause: Determine immediate and underlying causes (e.g., oil spill not cleaned, lack of signage).
4. Document the Incident Report: Fill out the standard report form including injury details, cause, witnesses, actions taken, and photographs if available.
5. Submit and Escalate: Submit the report to the supervisor and safety officer, and escalate to the management/committee if required.

#### B. Multiple Choice Questions (5\*10 =50 marks)

01	Why Safety?			
	<input type="checkbox"/>	A. Moral	<input type="checkbox"/>	B. Legal
	<input type="checkbox"/>	C. Financial/Economic	<input type="checkbox"/>	D. All of the above
02	What is the primary focus of the Accident Cost Iceberg theory?			
	<input type="checkbox"/>	A. Maximizing profits	<input type="checkbox"/>	B. Minimizing accidents
	<input type="checkbox"/>	C. Reducing direct costs	<input type="checkbox"/>	D. Highlighting hidden indirect costs
03	What is the general statement of intent in a safety policy?			

	<input type="checkbox"/>	A. Detailed procedures for handling workplace hazards	<input type="checkbox"/>	B. Specific goals for reducing accidents
	<input type="checkbox"/>	C. A declaration of the organization's commitment to safety	<input type="checkbox"/>	D. All of the above
04	What is the purpose of the PDCA Cycle in safety management?			
	<input type="checkbox"/>	A. To make work harder	<input type="checkbox"/>	B. To ignore safety issues
	<input type="checkbox"/>	C. To improve safety continually	<input type="checkbox"/>	D. To confuse employees
05	What is a Toolbox Talk?			
	<input type="checkbox"/>	A. A chat about tools only	<input type="checkbox"/>	B. A safety meeting about daily tasks
	<input type="checkbox"/>	C. A financial meeting	<input type="checkbox"/>	D. A technology discussion
06	Who is responsible for providing safe working conditions?			
	<input type="checkbox"/>	A. Employees only	<input type="checkbox"/>	B. Employer only
	<input type="checkbox"/>	C. Both employer and employees	<input type="checkbox"/>	D. Outsiders
07	Why is accident reporting important?			
	<input type="checkbox"/>	A. To discourage safety awareness	<input type="checkbox"/>	B. To hide incidents from regulatory bodies
	<input type="checkbox"/>	C. To identify hazards, investigate causes, and prevent future accidents	<input type="checkbox"/>	D. All of the above
08	Why is safety culture important in the workplace?			

	<input type="checkbox"/>	A. It enhances employee morale and productivity	<input type="checkbox"/>	B. It reduces the need for safety equipment
	<input type="checkbox"/>	C. It allows organizations to avoid legal liability	<input type="checkbox"/>	D. All of the above
09	What does LEL stand for in gas testing?			
	<input type="checkbox"/>	A. Limited Environmental Level	<input type="checkbox"/>	B. Lower Explosive Limit
	<input type="checkbox"/>	C. Linear Energy Loss	<input type="checkbox"/>	D. Low Emission Level
10	What is the primary role of a safety committee in an organization?			
	<input type="checkbox"/>	A. Enforcing disciplinary actions for safety violations	<input type="checkbox"/>	B. Conducting safety training sessions for employees
	<input type="checkbox"/>	C. Promoting and maintaining a safe work environment	<input type="checkbox"/>	D. Monitoring productivity levels of employees



## SSD/VSQ/N0107: Fire Safety, fire fighting equipment, and fire evacuation plan

### A. Practical Activities/ Questions

Total Marks:50

A mock fire drill has been scheduled at a warehouse. Perform a role play demonstrating how will you ensure employees to evacuate safely, use correct PPE, and follow emergency procedures.

#### Steps

1. Brief all workers on the drill and issue necessary PPE such as helmets, safety shoes, gloves, and reflective jackets.
2. Activate the fire alarm and initiate evacuation while observing if workers respond promptly and proceed to designated exits.
3. Guide teams to the emergency assembly point ensuring no one re-enters the premises and all work areas are fully evacuated.
4. Check attendance using the muster roll and report any missing personnel to fire marshals immediately.
5. Debrief the team after the drill, record observations including delays or PPE issues, and share feedback for future improvement.

### B. Multiple choice questions (5\*8= 40 marks)

11	Class A fires involve			
	<input type="checkbox"/>	A. Flammable liquids or gases	<input type="checkbox"/>	B. Electrical equipment or appliances
	<input type="checkbox"/>	C. Ordinary combustible materials like wood or paper	<input type="checkbox"/>	D. Metals or metal alloys
12	What does the fire tetrahedron consist of?			
	<input type="checkbox"/>	A. Water, foam, dry chemical, Chain Reaction	<input type="checkbox"/>	B. Heat, oxygen, combustible materials, Chain Reaction

	<input type="checkbox"/>	C. Red, blue, yellow zones, Chain Reaction	<input type="checkbox"/>	D. Extinguishers, alarms, sprinklers, Chain Reaction
13	What is the role of an assembly point during emergency evacuations?			
	<input type="checkbox"/>	A. To store firefighting equipment	<input type="checkbox"/>	B. To gather occupants at a safe location outside the building
	<input type="checkbox"/>	C. To direct occupants back into the building	<input type="checkbox"/>	D. All of the above
14	What are some common safety hazards associated with working in the oil and gas industry?			
	<input type="checkbox"/>	A. Hydrogen sulphide exposure	<input type="checkbox"/>	B. Confined space hazards
	<input type="checkbox"/>	C. Fire and explosion risks	<input type="checkbox"/>	D. All of the above
15	What is the primary function of smoke detectors in fire safety?			
	<input type="checkbox"/>	A. To extinguish fires	<input type="checkbox"/>	B. To detect the presence of smoke and trigger an alarm
	<input type="checkbox"/>	C. To provide emergency lighting	<input type="checkbox"/>	D. All of the above
16	Where should fire extinguishers be placed in the workplace for optimal accessibility?			
	<input type="checkbox"/>	A. In hidden or locked locations	<input type="checkbox"/>	B. In outdoor areas away from the building
	<input type="checkbox"/>	C. Near exits or escape routes and in areas prone to fire hazards	<input type="checkbox"/>	D. None of the above



17	What is the purpose of establishing fire safety protocols and procedures?			
	<input type="checkbox"/>	A. To increase the likelihood of a fire occurring	<input type="checkbox"/>	B. To encourage employees to ignore fire alarms
	<input type="checkbox"/>	C. To minimize the risk of fire-related injuries and damage	<input type="checkbox"/>	D. All of the above
18	Why is it important to have a Fire Safety and Emergency Management plan?			
	<input type="checkbox"/>	A. To comply with regulations	<input type="checkbox"/>	B. To ensure employee safety
	<input type="checkbox"/>	C. To prevent property damage	<input type="checkbox"/>	D. All of the above
<b>C. Short Question (3*10marks=30 marks)</b>				
What do you mean by fire triangle and fire tetrahedron and write principle of fire extinction?(Maximum 250 words)				
<b>SSD/VSQ/N0111: Accident Prevention Methodologies</b>				
<b>A. Practical Activities/Questions</b>			<b>Total Marks:50</b>	
A chemical spill has occurred in the storage section of the facility. As the Safety Executive, you are responsible for analyzing how the incident happened and what could have followed by using Fault Tree and Event Tree Analysis methods.				
<b>Steps</b>				
1. Review the incident and define the top event, such as “Chemical Spill Occurred,” then begin identifying all possible immediate and basic causes.				
2. Use fault tree logic to trace back contributing failures like valve malfunction, human error, or delayed detection.				
3. Develop an event tree starting from the spill and branch out possible outcomes based on whether containment, alarms, and evacuation worked.				

4. Analyze each event path to assess severity, probability, and system weaknesses that led to escalation or control.
5. Document the tree diagrams, findings, and recommend preventive measures such as regular valve checks, alarm system upgrades, and response training.

### B. Multiple choice questions (5\*8= 40 marks)

19	What does the term "accident" refer to?			
	<input type="checkbox"/>	A. A deliberate action	<input type="checkbox"/>	B. An unplanned and unforeseen event resulting in injury or damage
	<input type="checkbox"/>	C. A routine procedure	<input type="checkbox"/>	D. A scheduled task
20	What does the frequency rate measure in workplace safety?			
	<input type="checkbox"/>	A. The rate of incidents per hour worked	<input type="checkbox"/>	B. The rate of lost time cases per hour worked
	<input type="checkbox"/>	C. The total number of hours worked in a given period	<input type="checkbox"/>	D. The total number of incidents in a given period
21	What does the DART rate measure in workplace safety?			
	<input type="checkbox"/>	A. The rate of incidents per hour worked	<input type="checkbox"/>	B. The total number of hours worked by all employees
	<input type="checkbox"/>	C. The number of cases involving days away from work, restricted work, or job transfer per 100 full-time employees	<input type="checkbox"/>	D. The average number of lost workdays per incident
22	What is the main difference between Fault Tree Analysis (FTA) and Event Tree Analysis (ETA)?			
	<input type="checkbox"/>	A. FTA analyses the causes leading to a specific event, while ETA examines the consequences following a specific event.	<input type="checkbox"/>	B. FTA evaluates the reliability of individual components, while ETA assesses the probability of system failure
	<input type="checkbox"/>	C. FTA starts with the failure and traces backward, while ETA starts with an initiating event and traces forward	<input type="checkbox"/>	D. FTA is used for qualitative analysis, while ETA is used for quantitative analysis

23	What is the main purpose of Job Safety Analysis (JSA)?			
	<input type="checkbox"/>	A. To identify potential hazards associated with specific job tasks	<input type="checkbox"/>	B. To evaluate employee performance in safety procedures
	<input type="checkbox"/>	C. To analyze the root causes of workplace incidents	<input type="checkbox"/>	D. To assess the financial impact of workplace accidents
24	What is the primary goal of Hazard Identification and Risk Assessment (HIRA)?			
	<input type="checkbox"/>	A. To eliminate all hazards in the workplace	<input type="checkbox"/>	B. To assign blame for workplace accidents
	<input type="checkbox"/>	C. To identify potential risks and implement measures to mitigate them	<input type="checkbox"/>	D. To increase productivity by ignoring safety concerns
25	According to Maslow's theory of Hierarchy of Needs, which of the following needs must be satisfied first before an individual can progress to higher-level needs?			
	<input type="checkbox"/>	A. Self-actualization needs	<input type="checkbox"/>	B. Safety needs
	<input type="checkbox"/>	C. Esteem needs	<input type="checkbox"/>	D. Social needs
26	According to Vroom's Expectancy Theory, which of the following factors influences an individual's motivation to exert effort?			
	<input type="checkbox"/>	A. Achievement, recognition, and responsibility	<input type="checkbox"/>	B. Physiological, safety, and social needs
	<input type="checkbox"/>	C. Hygiene factors and motivators	<input type="checkbox"/>	D. Expectancy, instrumentality, and valence
<b>C. Short Question (10 marks)</b>				
Explain the domino's theory of accident causation model. (Maximum 250 words)				



## SSD/VSQ/N0108: Hazard Identification, Categories and Control

### A. Practical Activities/ Questions

**Total Marks:50**

At a construction site, workers are exposed to excessive dust during cutting and grinding operations. Perform a role play demonstrating how will you implement the hierarchy of control to reduce this hazard effectively.

#### Steps

1. Identify the hazard source by observing the task and confirming dust generation during cutting operations.
2. Apply elimination or substitution by checking if pre-cut materials can be used or if a less dusty material is available.
3. Implement engineering controls such as installing local exhaust ventilation or wet cutting systems to suppress dust.
4. Introduce administrative controls like rotating workers, restricting time spent in the high-exposure zone, and scheduling dust-generating tasks during off-peak hours.
5. Provide appropriate PPE such as N95 respirators and ensure workers are trained in their proper use and maintenance.

### B. Multiple choice questions (5\*8= 40 marks)

27	What is an unsafe act?			
	<input type="checkbox"/>	A. An action that complies with safety regulations	<input type="checkbox"/>	B. A behaviour that violates safety procedures and puts oneself or others at risk
	<input type="checkbox"/>	C. A decision made by management to prioritize productivity over safety	<input type="checkbox"/>	D. An accidental occurrence with no foreseeable consequences
28	Administrative controls include			
	<input type="checkbox"/>	A. Physical barriers and guards	<input type="checkbox"/>	B. Fire extinguishers and sprinkler systems

	<input type="checkbox"/>	C. Policies, procedures, and training to change behaviour or reduce exposure to hazards	<input type="checkbox"/>	D. Safety goggles and gloves
29	What is the goal of risk perception management?			
	<input type="checkbox"/>	A. To eliminate all risks	<input type="checkbox"/>	B. To ensure risks are perceived accurately
	<input type="checkbox"/>	C. To manipulate perceptions of risks	<input type="checkbox"/>	D. To ignore risks entirely
30	Which of the following is at the last of the hierarchy of controls for managing risks?			
	<input type="checkbox"/>	A. Personal Protective Equipment (PPE)	<input type="checkbox"/>	B. Elimination
	<input type="checkbox"/>	C. Engineering controls	<input type="checkbox"/>	D. Administrative controls
31	How can hazards related to radiation be controlled?			
	<input type="checkbox"/>	A. Using protective clothing and equipment	<input type="checkbox"/>	B. Encouraging prolonged exposure to radiation
	<input type="checkbox"/>	C. Ignoring safety regulations	<input type="checkbox"/>	D. None of the above



32	Which term refers to the extent to which an individual or organization is willing to accept risk?			
	<input type="checkbox"/>	A. Risk perception	<input type="checkbox"/>	B. Risk acceptance
	<input type="checkbox"/>	C. Risk tolerance	<input type="checkbox"/>	D. Risk behavior
33	What is the primary objective of a Hazard and Operability Study (HAZOP)?			
	<input type="checkbox"/>	A. To identify potential hazards and assess their consequences	<input type="checkbox"/>	B. To evaluate the operability of equipment and processes
	<input type="checkbox"/>	C. To conduct emergency response drills	<input type="checkbox"/>	D. To analyze the financial performance of a project
34	What is the purpose of risk magnitude appraisal?			
	<input type="checkbox"/>	A. To eliminate all risks	<input type="checkbox"/>	B. To evaluate the potential impact of risks
	<input type="checkbox"/>	C. To communicate risks to stakeholders	<input type="checkbox"/>	D. None of these
<b>NOS-SSD/VSQ/N0112.Pollution &amp; Environment Management, Global warming, and sustainability (8*5=40)</b>				
<b>A. Practical Activities/ Questions</b>				<b>Total Marks:50</b>
You are assigned to a construction site generating mixed waste — concrete debris, plastic packaging, food waste, and hazardous materials. Demonstrate a plan for proper waste management system.				
<b>Steps</b> 1. Conduct a waste audit to identify types and quantities of waste generated daily at different work zones. 2. Classify waste into categories such as biodegradable, recyclable, construction debris, and hazardous waste. 3. Allocate color-coded bins and set up designated collection points for each waste type across the site. 4. Coordinate with certified waste handlers for scheduled pickup, recycling, or safe disposal as per legal guidelines.				



5. Train all site workers on segregation rules, signage identification, and reporting of improper disposal practices.

**B. Multiple choice questions (5\*8= 40 marks)**

35	Which of the following pollutants is known to cause acid rain?			
	<input type="checkbox"/>	A. Carbon dioxide (CO <sub>2</sub> )	<input type="checkbox"/>	B. Nitrogen oxides (NO <sub>x</sub> )
	<input type="checkbox"/>	C. Methane (CH <sub>4</sub> )	<input type="checkbox"/>	D. Sulphur dioxide (SO <sub>2</sub> )
36	What is the primary method used for disposing of biomedical waste?			
	<input type="checkbox"/>	A. Recycling	<input type="checkbox"/>	B. Landfilling
	<input type="checkbox"/>	C. Composting	<input type="checkbox"/>	D. Incineration
37	What is the purpose of an effluent treatment plant (ETP)?			
	<input type="checkbox"/>	A. To treat solid waste before disposal	<input type="checkbox"/>	B. To recycle plastic waste into new products
	<input type="checkbox"/>	A. To treat wastewater before discharge into the environment	<input type="checkbox"/>	B. To convert organic waste into biogas
38	What is the primary objective of hazardous waste management?			
	<input type="checkbox"/>	A. To increase the production of hazardous waste	<input type="checkbox"/>	B. To dispose of hazardous waste in landfills
	<input type="checkbox"/>	C. To minimize the generation and impact of hazardous waste	<input type="checkbox"/>	D. To release hazardous waste directly into water bodies

39	What is the primary benefit of incorporating the 6R's approach into waste management practices?			
	<input type="checkbox"/>	A. Increased generation of waste	<input type="checkbox"/>	B. Higher disposal costs
	<input type="checkbox"/>	C. Decreased public awareness	<input type="checkbox"/>	D. Reduced environmental impact
40	The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change (UNFCCC). What is the main objective of the Kyoto Protocol?			
	<input type="checkbox"/>	A. To reduce greenhouse gas emissions worldwide	<input type="checkbox"/>	B. To promote renewable energy technologies
	<input type="checkbox"/>	C. To enhance global biodiversity conservation efforts	<input type="checkbox"/>	D. To regulate international trade in environmental goods
41	What is the primary purpose of Environmental Impact Assessment (EIA)?			
	<input type="checkbox"/>	A. To estimate the economic costs of environmental degradation	<input type="checkbox"/>	B. To identify potential environmental effects of proposed projects
	<input type="checkbox"/>	C. To assess the social impacts of infrastructure development	<input type="checkbox"/>	D. To determine the profitability of industrial ventures
42	Remote sensing refers to:			
	<input type="checkbox"/>	A. Monitoring environmental parameters using satellites or aircraft	<input type="checkbox"/>	B. Direct observation of environmental conditions by human observers
	<input type="checkbox"/>	C. Analyzing soil and water samples in a laboratory setting	<input type="checkbox"/>	D. Conducting field surveys to collect environmental data
<b>C. Short Question (10 marks)</b>				
Explain greenhouse effect and greenhouse gas.				



## SSD/VSQ/N0109: Statutes & Legislative requirements in Health & Safety

### A. Practical Questions

Total Marks:50

You are assigned to a large infrastructure project involving controlled blasting.

#### Steps

1. Review the Explosives Act and applicable rules to understand licensing requirements for storage, handling, and transport of explosives.
2. Verify that only authorized vendors and licensed personnel are involved in procurement and handling of explosives.
3. Inspect the magazine (explosive storage) for compliance with safety distance, construction standards, and inventory logs.
4. Ensure proper documentation for every stage — including purchase, transport permits, usage logs, and disposal records.
5. Conduct safety briefings and regulatory awareness training for all staff involved in handling explosives, including emergency response procedures.

### B. Multiple choice questions (5\*8= 40 marks)

43	What is the primary objective of the BOCW Act of 1996?			
	<input type="checkbox"/>	A. Regulate employment conditions for workers in the manufacturing sector	<input type="checkbox"/>	B. Ensure safety, health, and welfare of construction workers
	<input type="checkbox"/>	C. Regulate environmental compliance in the construction industry	<input type="checkbox"/>	D. Promote international trade agreements

44	What is the primary objective of the Environment Protection Act, 1986?			
	<input type="checkbox"/>	A. Regulate employment conditions in all industries	<input type="checkbox"/>	B. Ensure the safety, health, and welfare of workers
	<input type="checkbox"/>	C. Protect and improve the environment	<input type="checkbox"/>	D. None of the above
45	What is the primary objective of the Oil Industry Safety Directorate (OISD) guidelines?			
	<input type="checkbox"/>	A. Regulate employment conditions in the oil and gas industry	<input type="checkbox"/>	B. Ensure safety and health of workers in the oil and gas industry
	<input type="checkbox"/>	C. Promote international trade agreements	<input type="checkbox"/>	D. Ensure environmental protection in the oil and gas industry
46	What is the focus of the ILO Guidelines related to EHS?			
	<input type="checkbox"/>	A. Employee welfare	<input type="checkbox"/>	B. Environmental protection
	<input type="checkbox"/>	C. Safety at workplaces	<input type="checkbox"/>	D. All of the above
47	What aspects of building construction does the National Building Code cover?			
	<input type="checkbox"/>	A. Structural design, fire safety, and plumbing	<input type="checkbox"/>	B. Landscaping and exterior design
	<input type="checkbox"/>	C. Architectural design and aesthetics only	<input type="checkbox"/>	D. Electrical wiring and HVAC systems

48	Which NFPA standard covers the installation of sprinkler systems in buildings?			
	<input type="checkbox"/>	A. NFPA 101	<input type="checkbox"/>	B. NFPA 13
	<input type="checkbox"/>	C. NFPA 72	<input type="checkbox"/>	D. NFPA 20
49	What is the primary responsibility of the Petroleum & Explosive Safety Organization (PESO)?			
	<input type="checkbox"/>	A. To promote the use of explosives in construction projects	<input type="checkbox"/>	B. To conduct research on explosive materials for military purposes
	<input type="checkbox"/>	C. To regulate the manufacturing, storage, and transportation of explosives and petroleum products	<input type="checkbox"/>	D. To encourage the unrestricted sale of explosives to the public

50	What is the primary purpose of the Motor Vehicles Act, 1988?			
	<input type="checkbox"/>	A. To promote the sale of motor vehicles	<input type="checkbox"/>	B. To ensure road safety and regulate the use of motor vehicles
	<input type="checkbox"/>	C. To regulate the manufacturing of motor vehicles	<input type="checkbox"/>	D. To establish speed limits on highways
51	Which authority is responsible for adjudicating disputes and ensuring compliance with the Employee's Compensation Act, 1923?			
	<input type="checkbox"/>	A. Ministry of Labor and Employment	<input type="checkbox"/>	B. Employees' State Insurance Corporation (ESIC)
	<input type="checkbox"/>	C. Indian Medical Association (IMA)	<input type="checkbox"/>	D. Labour Court
52	What does the OSH Code 2020 focus on?			
	<input type="checkbox"/>	A. Environment protection only	<input type="checkbox"/>	B. Occupational Safety and Health standards
	<input type="checkbox"/>	C. Only mining safety	<input type="checkbox"/>	D. Traffic and vehicle safety at workplaces

### SSD/VSQ/N0110: Health, Hygiene, Environment & Psychological Health

#### A. Practical Questions

**Total Marks:50**

You are appointed as the Safety Executive at a new construction site. Demonstrate how will you assess current hygiene conditions and implement a plan to maintain worker health, sanitation, and overall cleanliness.

#### Steps

1. Inspect the site to identify gaps in hygiene infrastructure such as handwashing stations, toilets, drinking water, and waste disposal areas.

2. Plan and allocate resources for setting up clean and separate toilets, potable water points, and designated washing areas.
3. Schedule regular cleaning of common areas including toilets, canteens, rest zones, and maintain daily sanitation logs.
4. Provide hygiene awareness training to workers, including handwashing practices, personal cleanliness, and safe food habits.
5. Monitor implementation through regular audits and feedback, and make improvements based on worker needs and hygiene performance.

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

53	Which organization typically sets guidelines and regulations for ensuring health, hygiene, and sanitation at the workplace			
	<input type="checkbox"/>	A. World Health Organization (WHO)	<input type="checkbox"/>	B. United Nations Educational, Scientific and Cultural Organization (UNESCO)
	<input type="checkbox"/>	C. Occupational Safety and Health Administration (OSHA)	<input type="checkbox"/>	D. International Monetary Fund (IMF)
54	Which method is most appropriate for disposing of hazardous waste?			
	<input type="checkbox"/>	A. Landfilling	<input type="checkbox"/>	B. Recycling
	<input type="checkbox"/>	C. Incineration	<input type="checkbox"/>	D. Composting

55	What measures can be implemented to support the psychological health of workers?			
	<input type="checkbox"/>	A. Ignoring stress management programs	<input type="checkbox"/>	B. Neglecting to address workplace harassment or bullying
	<input type="checkbox"/>	C. Overloading workers with excessive workload	<input type="checkbox"/>	D. Providing counselling services and mental health support
56	What measures can be implemented to ensure cleanliness at a work site?			
	<input type="checkbox"/>	A. Regular cleaning schedules and waste management practices	<input type="checkbox"/>	B. Allowing waste to accumulate without proper disposal
	<input type="checkbox"/>	C. Providing minimal facilities and resources for maintaining cleanliness	<input type="checkbox"/>	D. None of the above
57	What is the significance of segregating waste at the source?			
	<input type="checkbox"/>	A. Increases waste collection cost	<input type="checkbox"/>	B. Reduces waste generation
	<input type="checkbox"/>	C. Facilitates recycling	<input type="checkbox"/>	D. All of the above
58	Who is responsible for ensuring compliance with health, hygiene, and cleanliness measures at a work site?			
	<input type="checkbox"/>	A. Only government agencies	<input type="checkbox"/>	B. Only workers
	<input type="checkbox"/>	C. Both employers and workers	<input type="checkbox"/>	D. None of the above
59	Which of the following statements is true regarding the impact of job insecurity on psychological health?			
	<input type="checkbox"/>	A. Job insecurity has no impact on psychological well-being.	<input type="checkbox"/>	B. Job insecurity can lead to anxiety and depression.

	<input type="checkbox"/>	C. Job insecurity increases job satisfaction.	<input type="checkbox"/>	D. Job insecurity fosters a sense of security.
60	Which of the following is an example of a psychosocial hazard in the workplace?			
	<input type="checkbox"/>	A. Adequate lighting	<input type="checkbox"/>	B. Workplace bullying
	<input type="checkbox"/>	C. Regular team-building activities	<input type="checkbox"/>	D. Ergonomic chairs
61	Which of following are stress management technique?			
	<input type="checkbox"/>	A. Rewards and Recognition Culture		B. Promoting Positive Work Culture
	<input type="checkbox"/>	C. Regular Survey and Feedback		D. All of the above
62	How does a positive working environment impact psychological health?			
	<input type="checkbox"/>	A. Increases stress levels		B. Decreases job satisfaction
	<input type="checkbox"/>	C. Leads to higher absenteeism		D. Improves morale and productivity

#### NOS- SSD/VSQ/N0104: Plan, Organize and Emergency protocols

#### A. Practical Questions

**Total Marks:50**

A sudden fire breaks out on the third floor of an under-construction commercial building due to an electrical short circuit. Perform a role play to establish emergency protocols to reduce harm and operational loss during incidents like fire, structural collapse, or gas leaks.

#### Steps

1. Identify potential emergencies specific to the site (fire, fall, electrical shock, gas leak) and map high-risk zones.
2. Prepare an emergency response plan that includes evacuation routes, assembly points, contact lists, and response roles.

3. Install emergency equipment like fire extinguishers, first-aid kits, sirens, emergency lights, and communication tools at strategic locations.
4. Conduct training and mock drills for all staff, including how to raise alarms, use extinguishers, guide evacuations, and assist injured persons.
5. Review and update protocols regularly based on drill outcomes, incident reports, and site condition changes to ensure continuous improvement.

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

63	What is the purpose of planning safety resources, schedules, measures, and timelines?			
	<input type="checkbox"/>	A. To increase risks	<input type="checkbox"/>	B. To ensure readiness as per overall work timelines
	<input type="checkbox"/>	C. To ignore safety measures	<input type="checkbox"/>	D. To eliminate all resources
64	Which of following is Techniques for Avoiding Resource Overload?			
	<input type="checkbox"/>	A. Resource Levelling	<input type="checkbox"/>	B. Prioritize Projects
	<input type="checkbox"/>	C. Linking Tasks	<input type="checkbox"/>	D. All of the above
65	What is the primary goal of emergency management?			
	<input type="checkbox"/>	A. Preventing all emergencies from occurring	<input type="checkbox"/>	B. Minimizing the impact of emergencies on people, property, and the environment
	<input type="checkbox"/>	C. Assigning blame for emergencies after they occur	<input type="checkbox"/>	D. Ignoring emergencies until they resolve themselves

66	How should resources be collected and provisioned to team members?			
	<input type="checkbox"/>	A. Randomly	<input type="checkbox"/>	B. As per task and timelines
	<input type="checkbox"/>	C. Without any planning	<input type="checkbox"/>	D. Ignoring task requirements
67	What is the importance of briefing to concerned co-workers, subordinates & superiors?			
	<input type="checkbox"/>	A. To increase confusion	<input type="checkbox"/>	B. To provide guidance for timely and correct completion
	<input type="checkbox"/>	C. To avoid communication	<input type="checkbox"/>	D. To eliminate briefing
68	What role does communication and briefing play in resource provisioning and task completion?			
	<input type="checkbox"/>	A. It leads to misunderstandings and conflicts	<input type="checkbox"/>	B. It increases workplace accidents
	<input type="checkbox"/>	C. It ensures that everyone is aware of their responsibilities and timelines	<input type="checkbox"/>	D. It discourages coordination among team members
69	What is the primary purpose of supervision and monitoring progress of work in the workplace?			
	<input type="checkbox"/>	A. To increase workplace hazards	<input type="checkbox"/>	B. To ensure that work is being done according to plan and timelines
	<input type="checkbox"/>	C. To discourage communication among team members	<input type="checkbox"/>	D. To delay project completion
70	How do emergency assembly areas contribute to workplace safety?			
	<input type="checkbox"/>	A. They increase workplace hazards	<input type="checkbox"/>	B. They decrease productivity
	<input type="checkbox"/>	C. They lead to delays in project completion	<input type="checkbox"/>	D. They provide designated areas for employees to gather during emergencies

71	What is the purpose of conducting regular drills and simulations of medical emergency scenarios?			
	<input type="checkbox"/>	A. To increase the likelihood of accidents occurring	<input type="checkbox"/>	B. To familiarize employees with emergency procedures and protocols
	<input type="checkbox"/>	C. To ignore medical emergencies until they resolve themselves	<input type="checkbox"/>	D. To assign blame for accidents after they occur
72	What is the primary purpose of an emergency rescue plan?			
	<input type="checkbox"/>	A. To prevent emergencies from occurring	<input type="checkbox"/>	B. To provide guidance on responding to emergencies
	<input type="checkbox"/>	C. To assign blame for emergencies	<input type="checkbox"/>	D. To ensure compliance with safety regulations



### NOS- DGT/VSQ/N0102: Employability Skills (5\*4=20)

#### A. Practical Questions

**Total Marks:50**

You are part of a team working on a construction project. A disagreement arises between two workers over task responsibility.

Demonstrate how will you show respectful and effective communication to help resolve the situation

#### Steps

1. Approach the individuals calmly and listen to both sides without interrupting.
2. Use polite language such as “I understand your point” or “Let’s find a solution together.”
3. Maintain appropriate body language—make eye contact, nod, and avoid aggressive gestures.
4. Express your thoughts clearly and respectfully, focusing on the issue, not the person.
5. Summarize the discussion and encourage teamwork with phrases like “Let’s work as a team to complete this task smoothly.”

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

73	What is the purpose of setting a career development plan?			
	<input type="checkbox"/>	A. To outline a series of unrelated jobs	<input type="checkbox"/>	B. To help organize short- and long-term professional goals
	<input type="checkbox"/>	C. To limit professional growth	<input type="checkbox"/>	D. To discourage continuous learning

74	Which skill is essential for effective communication in various settings?			
	<input type="checkbox"/>	A. Only speaking loudly to ensure hearing	<input type="checkbox"/>	B. Ignoring what others say
	<input type="checkbox"/>	C. Following communication etiquette and active listening techniques	<input type="checkbox"/>	D. Avoiding eye contact at all times
75	Which skill involves the ability to recognize and respect diverse perspectives, cultures, and backgrounds?			
	<input type="checkbox"/>	A. Social awareness	<input type="checkbox"/>	B. Time management
	<input type="checkbox"/>	C. Creative thinking	<input type="checkbox"/>	D. Learning to learn
76	What is the difference between a job and a career?			
	<input type="checkbox"/>	A. A job is temporary, while a career is long-term	<input type="checkbox"/>	B. A job is part-time, while a career is full-time
	<input type="checkbox"/>	C. A job is low-paying, while a career is high-paying	<input type="checkbox"/>	D. A job is entry-level, while a career is advanced
77	How can aptitude help in preparing a career development plan?			
	<input type="checkbox"/>	A. By identifying short-term goals	<input type="checkbox"/>	B. By identifying long-term goals
	<input type="checkbox"/>	C. By aligning goals with personal strengths and interests	<input type="checkbox"/>	D. By selecting a specific job title
78	What is the factors involved during safety planning?			
	<input type="checkbox"/>	A. Allocation of resources	<input type="checkbox"/>	B. Establishing schedules
	<input type="checkbox"/>	C. Implementing Safety measures	<input type="checkbox"/>	D. All of the above



## 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

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This is to confirm that the trainee has undertaken the assessment for the job role of Safety Executive (OSHE).

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

 <b>SAFETY SKILL DEVELOPMENT FOUNDATION</b> <b>ASSESSMENT SUMMARY SHEET</b> <b>Qualification Pack - Safety Executive (OSHE)</b> 												
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/N0106	12%	50	50	0								
SSD/VSQ/N0107	12%	50	50	0								
SSD/VSQ/N0111	9%	50	50	0								
SSD/VSQ/N0108	17%	50	50	0								
SSD/VSQ/N0112	9%	50	50	0								
SSD/VSQ/N0109	17%	50	50	0								
SSD/VSQ/N0110	8%	50	50	0								
SSD/VSQ/N0104	8%	50	50	0								
DGT/VSQ/N0102	8%	30	20	0								
Total Marks	100	430	420	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:			