PROFTECH LEADING INSTITUTE

Exams Guidance Document for Learners

International Diploma in Safety Engineering (IDSE)

(Exclusive for Open Book Non-Invigilated Exams
followed by a closing interview/s)

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Exams Explained

1-Introduction:

This exam guidance has been developed to ensure a fair and transparent assessment framework is provided for the learners and prospective learners so they may decide what skills they need to develop and how these skills will be tested/ assessed. This document will provide an insight about the type and method of assessments, assessment criteria, marking criteria, passing criteria and intended units and programme outcomes.

There are a number of learning outcomes which learners are expected to achieve in both units of International Diploma in Safety Engineering (IDSE). Testing all learning outcomes becomes really challenging when it comes to designing assessments as it may result in over or under testing of the learners as not all learning outcomes can be assessed in a time constraint exam arrangements. We have therefore identified key skills i.e. unit outcomes as assessment criteria which are based on learning outcomes mainly. Each question will test the learners' skills values and/or knowledge for a range of learning outcomes.

1.1-Type of Assessments

Both units of IDSE are assessed via Summative Assessment i.e. the learners will need to demonstrate their skill, values and knowledge in a given unit exam after the completion of their syllabus. There are no interim/formative assessments for this qualification.

1.2-Method of Assessment

Both units of IDSE will be assessed through an Online Non-invigilated Open book exams followed by interview/s to ensure that submitted work is learners' own. Time to complete each unit exam will be 24 hours while additional 2 hours will be given for submission of the learners' work through online medium. The learners/ prospective learners are advised not to be lulled into false sense of preparation that open book exams are easy and do not require prior studies/ research etc. While open book exams do not require mechanical memorization of any topic, they will test how effectively you apply your knowledge in a given situation, analyses for significant trends and patterns, evaluate the possible alternatives and create/innovate the solutions for continual improvement. It will be pointless if you copy/paste from internet/digital books as it will not suffice the question's requirements. For example learners will not be asked 'what are the principles of risk management" in an open book exam but they will be asked to "Apply principles of risk management in a given problematic situation/ scenario". In practical life, we all are often encountered with problems which require us to solve them in a manner open book exams are conducted rather than closed book exams. For any workplace problem, no one stops you to carry out research (internet, books etc.) in order to identify root causes and take corrective/ preventive measures. On the same principle, we have designed our assessments for both unit exams to test your critical thinking skills.

1.3-Assessment Criteria

The assessment criteria ensures that learners could relate learning outcomes with the expected deliverables (skills, values and knowledge in broader context) while studying for the IDSE qualification. It is therefore recommended that learners/ prospective learners must go through this document so they could develop the required competencies in a manner in which they will be assessed and there is no surprise (beyond the scope and criteria) for the learners when they are formally assessed as part of final assessments. The assessment criteria given for each unit will provide information on "how" and "to what extent" the learners particular skills and knowledge will be assessed.

1.3 a- Unit 1 Assessment Criteria

Unit 1 Learning Outcomes will be assessed based on following criteria to ensure the learner has developed the requisite skills as elaborated in IOSH competency Framework. Each question in Unit 1 exam will be framed using single or multiple assessment criteria so you must develop an understanding of each assessment criterion against the learning outcomes.

Sr#	Broad Assessment Criteria	Scope
1	Interpretation and Planning	You should be able to identify and establish the criteria (For OHS mgt system and its processes) including interpretation of each and every relevant requirements of the criteria (e.g. ISO 45001 or any company specific criteria). You should be able to plan all the elements of an OHS Management System, the resource requirements and intended outcomes of OHS mgt system accordingly. This may include OHS Management system scope, Maintaining Documented Information, Retaining Documented Information, OHS Policy, OHS Objectives, Key OHS processes, Operational Controls, Regulatory requirements, Competency requirements, Inspections and Audits, Risk Management, Internal and external issues, Outsourcing/control of subcontractors, Employees Involvement and participation, Incident Management, Potential Emergencies, Corrective/ Preventive Actions, Management Review requirements etc. The planning will be specific to the context of the organization and the learner must be able to plan for any type of organization in a specific context/ scenario given in the exam.
2	Execution /implementation	You should be able to implement and execute the requirements (which you have established as part of interpretation and planning) in an effective and efficient ways. This includes carrying out all the activities which have been planned as part of the OHS Management system. For example; establishing OHS policy, Establishing OHS objectives, Carrying out risk assessment activities, inspections & audits, establish effective and efficient procedures (e.g. legal and regulatory compliance procedure or OHS competency assessment procedure etc.) etc.
3	Analysis	You should be able to analyze any significant Data/ Data set, situation or event in context with OHS. Similarly you should be able to extract significant data pertaining to OHS from a given situation. You should be able to analyze any OHS specific Trends and Patterns (Including any factors which are influencing data/situation) which can help in future planning/ re-planning/forecasting. You should be able to establish basis for future planning/re-planning/forecasting based on the data/ situation analysis. Examples could be OHS Objectives conformity data over last 5 years, Employees involvement and participation data, training data, incident data, injury data, Inspections and audits data. Employees health data, Specific substance exposure data, Sickness leave data etc. Situation analysis examples include; employees work practices, under reporting, workplace behaviors, data manipulation, OHS culture etc.
4	Evaluation	You should be able to evaluate (in numeric terms e.g. %age, pi charts, graphs etc.) both OHS data and situation from their significance perspective. Similarly you should be able to suitably quantify inputs and outputs of processes/procedures for comparison and decision making in view of continual improvement perspective. You should be able to establish numeric ranking for various aspects related to OHS and evaluate and weigh them with previous/forecasted similar data/ situation. This includes evaluation of OHS Policy's performance, Employees' OHS performance, inspection system performance, OHS Culture, regulatory compliance, workers involvement and participation, Workers' morale, Incidents severity, Incident management system/procedures, OHS management system overall performance vs business performance, OHS management system cost vs OHS performance, etc.
5	Process Approach	You should be able to clearly identify various significant activities within processes, establish suitable procedure/s to attain the specific process requirements (Intended outcomes) by eliminating redundant activities and by arranging/combining significant activities in a logical manner showing the process flow direction in effective and efficient way. You should also be able to connect

		various OHS processes in an OHS management system and be able to review OHS Management system performance from Process Approach Perspective. Similarly you should be able to establish Process Flow Diagrams (PFD) or interpret PFD and convert them into a written documented procedure/s by setting resource requirements, assigning duties and responsibilities and establishing a performance criteria for the procedure/s. This includes establishing documented procedure/s for OHS Policy, OHS Objectives, regulatory compliance, Competency assessment and evaluation, Risk Assessments, Inspection and Audit, Management Reviews etc.
6	Financial Management	You should be able to effectively calculate the financial implications for the required resources (Human resource, Infrastructure, Cash, Management time etc.) for overall OHS management system provisions or any specific process/es. Similarly you should be able to achieve better OHS performance with as little resources keeping in view the risk profile acceptable risk level (various processes) of the organization you work with (e.g. you do not need a fully automated robotic painting booth if the volume of paint work is very low, rather you should plan for outsourcing). It requires a suitable financial management acumen while planning an OHS Management system or its processes/ procedure/s which includes; a-Establishing cost effective processes/ procedures and overall OHS Management system in the first place for a specific organization. b-Quantifying resources into numeric terms e.g. local currency c-Co-relating resources utilization and its impact on OHS performance (e.g. Training budget vs improvement in OHS performance, OHS Objectives resource utilization vs OHS objectives performance, cost on operational controls vs impact on H&S Performance etc.). d- evaluating alternatives based on cost vs impact implications. e-Need to outsource instead of establishing an in-house capability/capacity for any process/es As part of the assessment, this criterion will test your abilities mentioned above (a-e) for a number of learning outcomes e.g. Cost effective training, ohs objectives and goals, need for an IT based management system, inspections and audits, management review outputs etc.
7	Critical Thinking & Reasoning	Critical thinking and reasoning is very important skill required in a safety engineer/ advisor/ consultant/ manager etc. This criterion has been included in the assessment (exam) to ensure that the learners are able to distinguish between opinions and facts and can make a judgement by careful analysis of the facts or objective evidences through reasoning. They are able to establish reasons based on observations, knowledge, experience, and benchmarking etc. for all elements of an OHS management system or any specific process/es. As part of the assessment, this criterion will test your abilities for a number of learning outcomes e.g. need for OHS policy and objectives, deploying operational controls, frequency, number and type of inspections and/or audits, Management review outcomes, internal and external issues related to OHS, number of required documents, records retention period, competency scales, need for resources (OHS related), risk assessment outcomes, professional conduct etc.
8	Problem Solving	You should be able to identify the problem/s within OHS management system or its processes, establish a problem statement (e.g. non conformity statement or an observation), Weigh the problem from its significance perspective, Identify root cause/s of the problem and suggest measures to either eliminate the problem or minimize its impact in a given scenario keeping in view the organization's context.

		As part of the assessment, this criterion will test your abilities for a number of learning outcomes including; Observations, non-conformities, corrective and preventive actions, risk assessments, inspections and audits, training and competency, incident management, OHS Objectives, subcontracting, control of documented information, OHS performance reviews, etc.
9	Review	You should be able to review the OHS management system documents including the procedures, plans, related forms and registers etc. to ensure they are serving their intended function. You must be able to comment about their effectiveness which includes the following; a- Is the document under consideration complies with the requirement of the criteria (e.g. some clause of ISO 45001 etc.) b- Is the subject document serving its intended function for which it was established c- Are there any issues which are influencing the effectiveness of the document under consideration d- Do we really need this document or we can use some other document (or combine 2 or more separate documents into one single document) for the same intended purpose keeping in view the broader picture of OHS management system e- How can the document be improved for achieving the intended effectiveness f- Is the intended effectiveness of the document as planned is realistic and it is commensurate with the overall OHS Management system and business strategic direction of the organization Unit 1 assessment (Some question) will require you to review a document/ part of document (e.g. a procedure or forms etc.) in a given scenario and learners will be required to provide a response in terms of a complete review. This may include OHS Policy (Statement of intent), OHS objectives for a specific organization's functions, Calibration records or procedure, competency records or training procedure, Risk management procedure, PPE's issuance procedure, PTW procedure, inspection and audit, or Management review procedure etc.
10	Risk Management	Consideration factors are an important part of planning and risk management as without considering what and how something can influence organization's OHS performance, it is very unlikely that an effective system or risk assessments could be planned and implemented. If you are able to consider significant factors and weigh (Evaluate) them effectively, you are an excellent planner and risk manager. So you should be able to foresee, identify, analyze and evaluate various factors which can influence the health and safety performance of the organization you work with. Some factors directly influence the performance while other indirectly. As a Safety professional, you should be able to analyze their significance as well. If you missed a significant factor and considered an insignificant factor while planning, you will waste your resources. The generic "Factors" examples include (but not limited to)size of organization, competency level, organization's risk profile, subcontracted processes, Scope of OHS management system, Location, Regulatory requirements, H&S Culture etc. The learner must have clear understanding of various factors (Either direct or indirect) and should be able to establish a relationship between the Factors and the Potential Problem/ Opportunity in a clear and concise manner. In a given scenario, the learner must provide scenario specific responses only.
11	OHS & Business Strategies	OHS and business strategy must go hand in hand in the same direction. A safety professional thus have understanding of the relationship between OHS management system and business strategy or strategic direction in order to

		ensure that OHS management system should not be a burden rather it should assist and support business strategy. The organizations cannot stop their functions for an upcoming regulatory requirement related to health and safety. Therefore, it is the job of safety professionals to ensure that health and safety provisions at workplaces are based on forward thinking approach and never result in circumstances that may lead to negatively influence the business strategy/business model/business direction. Similarly, it is job of safety professionals to ensure health and safety management system is planned and designed keeping in view the business strategy. They must advise top management that health and safety of people should be prime element of business strategy. We shall test learners' skill and knowledge by giving them scenarios in which business strategy and ohs requirements/performance will be given and they will have to analyze and evaluate as per following criteria; a- In a given scenario how the business strategy and OHS management system are related/ unrelated b- In a given scenario, how business strategy can be improved by incorporating OHS management system requirements c- What need to be done in order to align OHS Mgt system outcomes and business strategy goals d- How OHS mgt system can be made an integral part of business strategy for effective utilization of resources
12	Effective Decision Making	Effective and timely decision making is very crucial in occupational health and safety. It is therefore one of the very desired skill we aim to assess from the learners as part of the syllabus. This skill may be tested in combination with other required skills explained above. In a given scenario, the learners will be required to take certain decisions related to OHS which will be assessed based on the following; a- The rationale, reasoning and criteria behind the decision b- The approach to decision making e.g. Collaborative, accommodating, avoiding, compromise or competing c- The foreseeable OHS impacts of the decision in a given situation d- The cost and other implications (Behaviors, ethics, morale etc.) with the decision you make. e- Effects on overall business performance/Strategy with the decisions you make. The examples of situations which may necessitate decision making include Internal Audit outcomes, Procedures review, risk control strategies, incident investigations, OHS resources requirements, revamping/ redesigning OHS Management system, compliance with regulatory requirements, setting OHS objectives, training requirements, etc.
13	Team Player	Safety professionals must have adaptability to work in teams and groups where they are expected to play significant role for achieving overall team/ group objectives related to health and safety. They are expected to be part of solution not the problem. The learners' "Team Player" skills will be tested in combination with other skills during the exams and the assessor will make his judgement as per following criteria; a- Considering opinions from other team members b- Respecting diverging and conflicting opinions of team members c- Maintain respect, team spirit and cohesion within team d- Maintain unbiased and neutral approach keeping aside personal preferences, likes and dislikes e- Understanding roles and responsibilities of one's own and others f- Remain positive i.e. be part of the solution not the problem

		The examples of "working in teams "may include establishing risk control strategies, incident investigations, data analysis and evaluation, inspection and audit scope and plan finalizing, internal audits, Management review output decisions, skill level assessment/ categorization exercises etc.
14	Communication	Communication is highly significant desired skill in safety professionals. We aim to assess the communication skill in our assessment questions as follows; a- How effectively learners can report about an event/incident b- Writing investigation reports based on given situations/ scenarios c- Writing letters to the management about health and safety requirements at workplaces and seeking additional support etc. d- Communicating (written) with external organizations e.g. regulatory body about health and safety issues e- Compare various communication methods and identify the suitable method (in a given situation) and its cost implications to achieve intended results e.g. mass awareness campaigns etc. f- Design suitable criteria for measuring the effectiveness of the proposed communication method g- Understand and consider communication barriers and incorporate those risks within OHS mgt system procedures to eliminate or mitigate the damage due to miscommunication/ lack of communications. h- Identify "What" "When" "How" and "Who" to communicate significant OHS matters The learners will be given a situation/ scenario and based on their responses, their communication skills will be assessed as part of Unit 1 exam.
15	Leadership	As a safety professionals you may be working in a leadership role within an organization. It is therefore pertinent that you exhibit certain leadership traits as part of your role related to health and safety. This skills will be assessed not only as your overall approach while responding to various questions in Unit 1 but specifically exhibiting leadership skills in a given scenario. What an examiner expects from learners (as part of assessment) are following leadership traits; a- How positive behaviors (Health and safety oriented) can be influenced through leadership b- Financial and other management (conflict, project, change and/or knowledge managements) skills c- Leading by example d- Understanding strengths and weaknesses of people you lead e- Tapping productivity and effectiveness from the people you lead f- Handling accidents and post-accident events without letting down the morale of workers g- Establish incentive and punitive (disciplinary) criteria for people you lead in context with overall business strategy and context of the organization. h- Teams building i- Future oriented approach j- Continual improvement approach k- Ethical conduct The relevant examples may include learners' leadership roles in; influencing OHS culture by visible actions, improving health and safety related attitudes and behaviors of workers, workers involvement and participations in OHS matters e.g. risk management or establishing OHS objectives, encouraging incident reporting, influencing compliance with health and safety requirements, incident investigations, introducing and embracing new technology at workplaces, Generating training requirements to fill the competency gap, ensuring ethical conduct etc.

1.3 b- Unit 2 Assessment Criteria

Unit 2 Learning Outcomes will be assessed based on following criteria to ensure the learner has developed the requisite Technical skills as required by the programme objectives. Each question in Unit 2 exam will be framed using single or multiple assessment criteria so you must develop an understanding of each assessment criterion against the learning outcomes.

Sr#	Broad Assessment Criteria	Scope
1	Simple Geometric and other basic Calculations	The learners should understand the simple geometric and other basic calculations and apply those calculations as part of their safety role within an organization. Geometric calculations (for the syllabus) are limited to Area, perimeter/ circumference, radius, diameter for Circle, triangle and square/rectangle. Similarly the learners must understand the use of Sin θ, Cos θ and Tan θ for a simple right angle triangle. Basic calculations include calculating mean and median values for a given data set. The subject skill will be tested through scenario based questions where learner will need to calculate in order to reach to the conclusion for effective health and safety provisions.. Examples include (But not limited to) calculate wind pressure on a certain shape/size, calculate horizontal/vertical component of the forces e.g. on a crane boom, Calculate right ramp angle for wheelchairs, calculate Time Weightage Average (TWA), lifting plan calculations, calculating applied pressure on a given area, calculating mechanical advantage of basic machines and hydraulic system in a given arrangement etc.
2	Simple Machines' principles	The learners should be able to understand the working principles and mechanical advantage of 6 basic simple machines e.g. Screw, Pulley, Lever, wheel and axle, wedge and inclined plane. They should be able to apply the working principles of these machines (alone or in combination) to ensure health and safety provisions at workplaces e.g. lifting heavy loads with ease. The subject skill will be tested exclusively or in combination with other skills of Unit 2 through scenario based questions where learners will need to apply their knowledge for workplace problem solving. Examples include (But not limited to) lifting equipment's' capacities, uses and limitations, Design factors which may influence the performance of lifting equipment's, Provide input for effective engineering controls' or work equipment purchases, foresee and establish controls when lifting equipment's' capacities may be tampered in a given situation, Identify processes at the workplace where manual work could be replaced with simple machines from ergonomics perspective, setting equipment's' inspection frequencies etc.
3	Physical Quantities and Principles	The learners should be able to understand the physical principles and physical quantities and apply them for health and safety provisions at the workplaces. The physical principles included in Unit 2 syllabus are Inertia, law of conservation of energy and Pascal law. Physical quantities in the unit syllabus are Momentum, Acceleration, force, load, Impulse, Work, Power, Moment, Pressure, friction, heat and temperature. The subject skill will be tested through scenario based questions where learners will be required to apply, analyze and/or evaluate physical principles and physical quantities for effective health and safety provisions at the workplaces. Examples include (But not limited to) understand the use of physical principles in equipment's/machines concerning health and safety e.g. elevators (lifts), seat belts, hydraulic equipment, anti-door slam equipment, etc. and apply, analyze and evaluate these principles in effective way for a requirement related to health and safety at the workplaces.

		Similarly, the examples of scenario for testing knowledge related to physical quantities include (but not limited to) rate of heat transfer and governing factors, impact on health and safety due to various forms of energy and/or their conversion, PPE's requirements in a given environment, structures' strength visual analysis e.g. scaffolds, control measures against slip using friction calculations, soft landing design against risk of fall, braking system considering momentum and impulse etc.
4	Mechanical Properties of Materials	The learners should be able to understand various mechanical properties of the materials and apply those properties for various health and safety requirements at the workplaces. The mechanical properties for unit 2 syllabus include Tensile strength, compressive strength, hardness, brittleness, ductility, toughness, elasticity, plasticity and malleability. Learners should be able to take mechanical properties into consideration while doing risk assessments related to structure/ equipment reliability and strength etc. and must have knowledge how these properties are effected by the work environment e.g. humidity, heat, load, temperature etc. Learners should be able to suitably identify the required mechanical properties in materials as per their intended and implied uses. They should be able to understand how each of these mechanical properties can be measured through testing and apply the knowledge and skill as part of the equipment/ structure failure investigations. The subject skill will be tested in the assessment questions by providing a scenario which will require the learners to apply relevant knowledge and skill. Examples include (But not limited to) equipment failure investigations, analysis of a structure from its strength perspective e.g. scaffold platforms, selection of suitable PPEs in a given scenario etc.
5	Chemical Properties of substances	The learners should be able to understand various chemical properties of substances; including their nature (e.g. solid, liquid or gas), toxicity, flammability, permissible exposure limits (LTEL and STEL), apply these properties for health and safety risk assessments, analyze and evaluate potential impact on human lives (workers as well as community) in a workplace situation and create solutions to eliminate/mitigate the negative impacts. The subject skill will be tested in unit 2 exam through scenario based question. Examples include (but not limited to) identifying suitable detection equipment, analyze and evaluate the performance of detection equipment, Establish control measures in a given situation related to risk of exposure to chemical substances, identifying work practices which may give rise to chemical exposures, factors which may influence the performance of existing control measures in a given situation, understanding hazards and risks with transportation of chemicals and apply suitable controls, analyze and evaluate potential impact due to the type and nature of chemical substances at workplaces versus emergency evacuation and rescue plan in a given situation etc.
6	Human Physiology from OHS perspective	Understanding human physiology is very important in occupational safety and health. Safety professionals must understand the human limitations against exposure to chemicals, Musculoskeletal disorders (MSD) and take suitable measures after careful analysis and evaluation of workplace conditions. The subject skill will be tested in unit 2 exam through scenario based question. Examples include (but not limited to) control measures against specific chemical hazards in a given scenario, control measures against MSD in a given scenario, analysis of prevailing control measures and evaluating them for their effectiveness etc.

7	OHS Risk Management	The learners should be able to establish the risk profile of the organization based on; complexity of organization's processes, relevant regulatory requirements, OHS Culture, workforce competence, resources availability for OHS management system, previous internal/ external audit outcomes, incidents/accident history, and efficiency and effectiveness of existing OHS management system. They should also be able to establish Risk Management Plans including the type and extent of risk assessments, competence requirements, frequency of risk assessments, establish and evaluate resources requirements for risk assessment results' implementation, monitoring and measuring the performance of risk management plan and take timely corrective and preventive measures for continual improvement. The learners will be assessed for the subject skill during unit 2 exam using scenario based questions as follows; a- The learners may be asked to establish the risk profile of the given organization in the scenario. and/or b- The learners may be asked to establish risk management plan for a given organization in the scenario. and/or c- The learners may be asked to provide various risk methodology options including their strengths and weaknesses for a given organization in the scenario. and/or d- The learners may be asked to review the performance of risk management plan of a given organization and provide feedback with opportunity for improvements along with cost and other implications.
8	Technical investigations	The learners should be able to carry out technical investigations in an effective and efficient manner as an investigation team leader. They should be able to select suitable team members (Technical, finance, etc.) as per the scope of investigation. They should assist management in establishing the scope of the investigation and reporting method including involving and reporting to various stakeholders during and after the investigation. They should also be able to differentiate facts from the opinions and use critical and analytical thinking in establishing the facts which must be based on objective evidences. They should be able to foresee the broad potential causes of the incident and establish methods to either rule out or establish the possibility against each potential cause. Learners should be able to gather findings of the investigations in factual manner. They should also be able to give suitable recommendations for subsequent perusal of management. Learners should also be able to establish effective checklists for identifying the root cause/s and should also be able to develop suitable and effective questionnaires specific to each witness. The learners will be assessed for the subject skill in unit 2 exam as follows; a- Learners may be asked to establish the scope of investigation in a given scenario b- Learners may be asked to establish a checklist of potential causes of the incident and the evidences/facts they wish to see in order to rule out or fix the cause/s in a given incident scenario. c- Learners may be asked to develop an effective questionnaire for the incident witness in a given scenario. d- Learners may be asked to establish the findings of the technical investigation for a given scenario e- Learners may be asked to analyze and evaluate the recommendations (Suitability, relevance, effectiveness etc.) of a technical investigation for a specific incident given in the scenario

9	Engineering Controls' Design and review	The learners should be able to establish the requirements for/of specific cost effective engineering controls against specific hazards. They should be able to foresee potential reasons which may cause the ineffectiveness of engineering controls in a given situation e.g. tampering, equipment abuse or misuse, lack of maintenance etc. and take suitable preventive measures. They should also be able to analyses and evaluate the performance of specific engineering controls and provide feedback to the management with respect to cost benefit analysis over a period. Learners will be assessed for the subject skill in unit 2 exam where they ll be asked to provide their response in a specific situation/scenario as follows; a- Provide the rationale for selecting the type and extent of engineering controls requirements (including cost implications) in a particular situation/ exam scenario b- Identify and evaluate the expected deliverables (OHS terms) for the proposed engineering controls. c- The factors which may influence the effectiveness of the engineering controls in a particular scenario and proposed actions to eliminate/mitigate those factors. d- Establish the requirements of redundant engineering controls in a given situation. e- Calculate the reliability and availability of engineering control system as a whole in a given situation.
10	Industrial Equipment	The learners should have clear understanding of the function, associated hazards and foreseeable risks (in a given organization) of various industrial equipment including (But not limited to) lifting equipment, elevators, pumps, compressors, steam boilers, heat exchangers, industrial vehicles, hydraulic machinery, construction machinery, generators, air conditioning plants, etc. The subject skill will increase their technical knowledge which will help them in risk management plan, technical investigations etc. as part of unit 2 syllabus. The specific assessment for this skill may include; a- Application of specific engineering controls against the industrial equipment hazards in a given environment. b- Potential misuse/abuse of the industrial equipment including tampering/ improvisation (for capacity/ capability enhancement) specific functions of equipment which may compromise the workplace safety in a given situation/ scenario.
11	Latest Available Technologies for OHS	The learners should have the information and understanding of latest technological options available specific to workplace health and safety. They must be able to analyze and evaluate them for use in a specific environment within the organization. They must be able to use latest technologies in a cost effective manner for OHS provisions at the workplaces. Examples include fire extinguishing technologies, rescue and escape technology, transport management technologies, airborne chemical detection technologies, biological hazards identification technologies and health surveillance technologies etc. As part of the assessment, the learners may be asked to respond to as follows; a- Latest technological options available for a given hazard in the exam scenario b- The limitations of the technological options in a given exam scenario

12	Future Oriented from OHS perspective	The learners must have clear understanding about the progress of evolution of various technologies, standards and procedures for OHS. They should also be able to provide their input regarding the future requirements in line with changing work environments (recent pandemic is a suitable example when the lives of billions of people were disrupted). They should be able to assess the gap between available technologies and future technology requirements in a given situation. Today's dream is tomorrows invention as all inventions are based on some stated/implied uses. The subject skill will be assessed by asking the learners about; a- What could have been done better in a given situation if the certain technological options would be available. b- What technological options do you wish to have in near future against specific hazards/ risks in a given scenario.

1.4- Marking Criteria

The following criteria will be used while marking both unit assessments; The score

will be given as per following details;

Relevancy of the answers with the questions' requirements

- Relevant Answer to the question in a given scenario
- Some irrelevant response included however there were some relevant details as well
- The answer is totally irrelevant to the question in given scenario

Practical Approach

- The answer is very practical
- The answer is somehow practical but will be difficult to execute
- The answer is bookish and theoretical

Completeness

- The answer is complete in all respect as per the question requirements
- The answer is incomplete and learner missed part of the question's requirements.

Logical Progression

- The learner logically progressed while answering the questions.
- The logical progression was missing but learner somehow made his point clear
- There was no logical progression and haphazard information was given to a specific question (As if copied from book or internet etc.)

Clarity

- The learner gave the answer with full clarity and there were no ambiguous responses.
- Clarity was somehow missing in the responses but examiner has managed to extract some relevant details from the answers
- There was no clarity in the answers which were full of ambiguousness

Conflicting Ideas within answers

- The learner has very good understanding about all learning outcomes and there were no conflicting ideas within the responses to various questions
- The learner has good understanding about the learning outcomes but there were occasional conflicting ideas which are acceptable
- The learner has many conflicting ideas within answers and shows the lack of understanding about the subject. (Work seems to be copied / sought help from other person)

Note: The marking for each response against a specific question will be based on quality of response within each marking criterion requirements. The marking will be based on qualitative judgment of the examiner and above criteria will be used as reference only for standardization of marking throughout the batch.

Unit 1

Total Marks: 150
Passing Marks: 75 (50%)

Note: A learner who scores minimum 70 marks in each unit will be given 5 additional marks to cater for error of judgement of the examiner for a subjective type assessment and the communication barriers inherent with the assessment. The benefit of error is thus provided to the learner. The result for such learners will be issued as 70+5*= 75* (5 Grace Marks).

Assessment structure

There will be 2 sections in Unit 1 exam i.e. Section "A" and Section "B".

- Section "A" will be a long scenario and at the end of scenario, there will be 5 questions related to the scenario. Each question will carry 10 marks. So overall Section "A" will carry 50 Marks. The detail of Section "A" has been given in "Guidance for the Online Open Book Non- Invigilated Exam for the learners" as sample Question Paper.

- Section "B" will be a 5 short scenarios and at the end of scenario, there will be 1 or 2 questions related to the scenario. Each question will carry 20 or 10 marks. So overall Section "B" will carry 100 Marks. The detail of Section "B" has been given in "Guidance for the Online Open Book Non- Invigilated Exam for the learners" as sample Question Paper

- The learner will need to overall pass in each unit exam and cumulative marks in Section "A" and "B" will be counted for the overall marks in each unit.

Unit 2

Total Marks: 150
Passing Marks: 75 (50%)

Note: A learner who scores minimum 70 marks in each unit will be given 5 additional marks to cater for error of judgement of the examiner for a subjective type assessment and the communication barriers inherent with the assessment. The benefit of error is thus provided to the learner. The result for such learners will be issued as 70+5*= 75* (5 Grace Marks).

Assessment structure

There will be 2 sections in Unit 1 exam i.e. Section "A" and Section "B".

- Section "A" will be a long scenario and at the end of scenario, there will be 5 questions related to the scenario. Each question will carry 10 marks. So overall Section "A" will carry 50 Marks. The detail of Section "A" has been given in "Guidance for the Online Open Book Non- Invigilated Exam for the learners" as sample Question Paper

- Section "B" will be a 5 short scenarios and at the end of scenario, there will be 2 questions related to the scenario. Each question will carry 10 marks. So overall Section "B" will carry 100 Marks. The detail of Section "B" has been given in "Guidance for the Online Open Book Non- Invigilated Exam for the learners." as sample Question Paper

- The learner will need to overall pass in each unit exam and cumulative marks in Section "A" and "B" will be counted for the overall marks in each unit.

Note: The learner must pass Unit 1 and Unit 2 separately.

A mandatory closing interview will be carried out within 15 working days after the exam. The results will only be issued after the satisfactory closing interviews i.e. the examiner being assured that submitted work is learner's own work without any plagiarism/ collusion etc.

Interview Criteria

The examiner will conduct the interview in the following manner.

- The examiner will introduce himself with the learner (Name only) and will let the learner know that the interview is being video recorded.

- The examiner will ask the full name of the learner and match his face with the ID provided earlier by the learner.

- The examiner will start with a small chat about career prospects and ambitions of the learner to put him/her on ease. This will be done for 1-2 minutes.

- The examiner will use "Learner Online Interview Form" F-OBE-030-1 separately for each learner. This form will be kept as record for 1 year from the date of interview.

- The examiner will then start asking the questions from the learner relevant to the Question paper. The purpose is to confirm that the submitted written work is the learners' own work without any external support by a person or organization.

- A total of 5-10 questions will be asked from the learner. The examiner may ask trailing questions to form his judgement.

- The examiner may ask any trailing question from the syllabus (Even if that was not part of the assessment directly) to form his opinion about the knowledge and skill of the learner. However, this is discretion of the examiner but overall 75% questions must be related to the specific unit exam.

- If a learner is answering some questions to the satisfaction of the examiner and some answers are conflicting to the submitted written work then the examiner may ask the learner that your written work is different than the verbal answers and let him explain his point. Based on the overall interview, the examiner will form his opinion (Based on evidences).

- The examiner will continue questioning the learner until an informed opinion is made either; The

submitted work is learner's own work
OR
The submitted work is not the learner's own work

- Conclusion could be either Satisfied/ Dissatisfied. Examiners must be satisfied for 70% of the answers to pass a learner or to be assured that the work submitted is learner/s own work.

- The examiner will thank the learner and let him know that his result notification will be issued in 5 working days without letting the learners know about the examiner's finding of the interview.

Note: If a learner uses offensive/ aggressive or inappropriate language/ gestures during the interview then the examiner may terminate the interview by letting the learner know that your interview is being terminated because of non-professional behavior. In all such cases, the learner result will not be issued and they'll be disqualified for minimum 3 years.

2- Things to do before the exam day/s

- Study and do a thorough research keeping in view the learning outcomes and assessment criteria
- Seek trainer guidance through online mediums if you may have any queries
- Understand the exam format i.e. what skills will be assessed and how they ll be assessed
- Its recommended that you attempt both unit exams sample assessment in a timed environment so you should know your strengths and weaknesses.
- Arrange a suitable internet connection so you should timely receive exam materials and send them back within stipulated time
- You must have plenty of sleep before the exam day so you should effectively and efficiently respond

3- Things to do on exam day/s

- Spend time in reading the complete question paper to understand the requirements for each question.
- Write on a page in bullet forms what are the question requirements against each question.
- You may take help from books and internet to respond to the question as per the requirements. You must write every response in your own words. No direct copy/paste from any source is allowed. Please read our policy on malpractice and plagiarism for open book exams.
- Schedule your whole exam time (24 hours) in an efficient manner. Its recommended that you must complete your answers well before the exam finish time so you have enough time to review your answers if they meet the questions requirements
- Report any malpractices you may observe (During the exam time) to ceo@plicert.com within 3 days after the exam. This may include any offers to support/help you in completing your exam by any individual/ organization.

4- Things NOT to do on exam day/s

- Do not take help from any individual/organization during the exam
- Do not help any other learner who is taking the exam.
- Do not directly copy paste from any source (books, internet etc.). Every response should be in your own wording
- Do not be part of a group of learners who are taking same exam on a specific physical location. It also includes being part through social media groups e.g. Whatsapp groups etc.

5- Making arrangements for the interview

- The learner must have a Zoom account and it should be communicated to Proftech Leading Institute atleast 1 week before the exam date.
- The account must be tested to ensure it is functional.
- Learners must add PLI zoom account (Will be provided before the exam date)
- Arrange for a suitable internet connection.
- Ensure availability on exact date and time. Each learner will be given a time slot of 30-60 mins and calls will be made any time within the specific time slot given.
- Ensure a peaceful and quiet environment to avoid distractions during the interview.

6- Conclusion

The exam guidance document will help you prepare for your exam in an effective and efficient way. It is recommended that you read this document before you start studying for IDSE so that you should prepare for the qualification in a result oriented manner. You may ask questions related to this document by sending an email to info@plicert.com or proftechleading@gmail.com.