



This learning product has been developed for Technip by CSTC Pty Ltd.

ASSESSMENT FOR BSBWHS404A

Student name	RYAN CHUA WEI HUI
Date of assessment submission	26/09/2015

Trainer/Assessor's name	
Date of assessment marking	Click here to enter a date.
Outcome for unit	☐ Competent ☐ Not Yet Competent

TASK INSTRUCTIONS

- The assessment for this unit of competency consists of the following:
 - A series of activities:** Some of these activities will require you to provide a response within this document, others will require you to gather evidence to demonstrate your knowledge and skills (overview below)
 - Quiz:** You will be required to complete a series of questions to demonstrate your knowledge and skills.
- At times, you will be provided with a specific business context to which you must respond, otherwise it is anticipated that you will use a workplace of your choosing (your own, or hypothetical) to provide the context to the task.
- At all times, the responses in your assessment must reference **Australian** (Queensland or Federal) documentation, including legislation, regulations, codes of practice, standards and guidance publications.

ACTIVITY OVERVIEW	REQUIRED FOR SUBMISSION
1. Identifying hazards	Workbook response (below)
2. Techniques, tools and processes for hazard identification	Workbook response (below)
3. Assessing and controlling risks	Workbook response (below)
4. Techniques, tools and processes for risk assessment	Workbook response (below)
5. Development, implementation and evaluation of risk control	Workbook response (below)
6. Policies, procedures, processes and systems	Workbook response (below)
7. Legislation, codes of practice and guidelines	Workbook response (below)
8. Duty holders and their duties	Workbook response (below)
9. Relevance for WHSMS	Workbook response (below)

ACTIVITIES

For the following activities, name a workplace that you wish to examine.

Name of workplace	Frabrication yard
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ACTIVITY 1

Identify two (2) hazards that may occur in your workplace. For each hazard identified, find information to explain:

- a) The nature and scope of the hazard
- b) The nature and scope of the harms caused by the hazard and how they happen

Also explain:

- c) How you advise others of this information in a way that address peoples' range of abilities and backgrounds. Be sure to also consider the timeframes in which you should advise others.
- d) The techniques, tools and processes used to identify each hazard. Try to select tools appropriate for the workplace and select different tools for each hazard.

Hazard 1	Nature and scope of hazard	Harms caused and how they happen	How you advise others	Techniques, tools and processes
Confined Space	Unsafe oxygen level Air normally contains 21% oxygen by volume, although oxygen levels of 19.5% — 23.5% by volume are considered to be safe. Some situations can cause the level of oxygen to dramatically decrease, leading to an oxygen-deficient atmosphere and possible asphyxiation. This may occur, for example, if oxygen in the atmosphere is: Displaced during purging of a confined space with an inert gas to remove flammable or toxic fumes	Fatality due to asphyxiation which resulted from insufficient oxygen in the confined space	The information would be advised through pre-work readiness review session with the workers, and supervisors involved	Hazard identification (HAZID), Job Safety Analysis (JSA), Toolbox Talk,
	Source of information (e.g. website address)	Source of information (e.g. website address)		
	Confined Space found at https://www.comlaw.gov.au/Details/F2011L02804/Html/Volume_3	Confined Space found at https://www.comlaw.gov.au/Details/F2011L02804/Html/Volume_3		

Hazard 2	Nature and scope of hazard	Harms caused and how they happen	How you advise others	Techniques, tools and processes
musculoskeletal disorder (MSD)	MSD is an injury to, or a disease of, the musculoskeletal system, whether occurring suddenly or over time. It does not include an injury caused by crushing, entrapment (such as fractures and dislocations) or cutting resulting from the mechanical operation of plant. MSDs may include conditions such as: sprains and strains of muscles, ligaments and tendons • back injuries, including damage to the muscles, tendons, ligaments, spinal discs, nerves, joints and bones • joint and bone injuries or degeneration, including injuries to the shoulder, elbow, wrist, hip, knee, ankle, hands and feet	MSD would occur if a person to lift, lower, push, pull, carry or otherwise move, hold or restrain any person, animal or thing involving one or more of the following: • repetitive or sustained force • high or sudden force • repetitive movement • sustained or awkward posture • exposure to vibration	The information would be advised through Monitoring the potential to cause MSDs. Hazards that arise from manual tasks generally involve interaction between a worker and: • the work tasks and how they are performed • the tools, equipment and objects handled • the physical work environment and also consult the workers and supervisors during pre-work readiness review session	Hazard identification (HAZID), Job Safety Analysis (JSA), Toolbox Talk,
	Source of information (e.g. website address)	Source of information (e.g. website address)		
	Code of Practice: Hazardous Task Force https://www.comlaw.gov.au/Details/F2011L02804/Html/Volume_2	Code of Practice: Hazardous Task Force https://www.comlaw.gov.au/Details/F2011L02804/Html/Volume_2		

Outcome for Activity 1	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 2

For the two (2) hazards identified in Activity 1:

- a) Explain how you contribute to applying the techniques, tools and processes identified
- b) Explain how you contribute to documenting the use of (and results of) hazard identification.
 - Be sure to identify the audience for the information and how you meet their ability/background requirements.
 - Also note the timeframes in which you communicate this information.

Hazard	Applying techniques, tools and processes	Contribute to documenting hazard identification
1	Organizing the HAZID workshop, JSA session which consist of management level, engineers in charge, and supervisor in charged. Then assist in identify the potential hazardous task and suitable control measures. This information then cascaded down through daily toolbox talk prior the work start.	Review the developed HAZID worksheet, minutes of meeting, risk rating and control measures.
2	Organizing the HAZID workshop, JSA session which consist of management level, engineers in charge, and supervisor in charged. Then assist in identify the potential hazardous task and suitable control measures. This information then cascaded down through daily toolbox talk prior the work start. Also organise a campaign to increase the wareness of the workers	1.Review the developed HAZID worksheet, minutes of meeting, risk rating and control measures. 2.Develop a proposal for the campaign to increase the awareness of the workers

Outcome for Activity 2	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 3

Identify two (2) risks that may exist in your workplace. For each risk identified, find information to explain:

- The nature and scope of the risk
- Risk controls that may be implemented to address the risk. Explain the time frames in which these risk control options should be implemented.

Also explain:

- Risk assessment techniques, tools and processes used for workplace hazards. Try to select tools appropriate for the workplace and select different tools for each risk.

Risk 1	Nature and scope of risk	Risk controls	Techniques, tools and processes
Entering confined space to do welding at the wall panel	The welder working in the confined space together with a fire watcher for over 8 hours continuously. In between of the working hours, 1 hour rest time would be given to the workers.	1. Barricade and sign to show the unauthorised entry and hazard 2. Gas test by authorised gas tester prior the work 3. Personal gas detector to be worn by the fire watcher 4. Standby person 5. Confined space training to the workers 6. Continuous ventilation 7. Rescue equipment ready at the main entrance 9. Gas test result display board	Permit to work (PTW) Job Safety Analysis (JSA) would be used as the tool to assess the risk.
	Source of information (e.g. website address)	Source of information (e.g. website address)	
	Confined Space found at https://www.comlaw.gov.au/Details/F2011L02804/Html/Volume_3	Confined Space found at https://www.comlaw.gov.au/Details/F2011L02804/Html/Volume_3	
Risk 2	Nature and scope of risk	Risk controls	Techniques, tools and processes
Lifting and hoisting operation	Lifting operation carrying out daily basis to lift materials to the wanted location which may cause fatality if the material dropped.	1. Certified lifting equipments 2. trained and competent crane operator, rigger and banksman 3. Approved lifting plan 4. Dedicated walkie talkie channel for the lifting teams 5. Barricade and sign around the lifting area 6. Lifting only applicable in good weather conditions 7. Toolbox talk prior the work begins 8. Crane inspection done by competent inspector	Permit to work (PTW) Job Safety Analysis (JSA) would be used as the tool to assess the risk.

	Source of information (e.g. website address)	Source of information (e.g. website address)	
	Crane Found at: http://www.safeworkaustralia.gov.au/sites/SWA/model-whs-laws/model-COP/Documents/Draft-COP-December-2012/DRAFT-Cranes-COP.pdf	Crane Found at: http://www.safeworkaustralia.gov.au/sites/SWA/model-whs-laws/model-COP/Documents/Draft-COP-December-2012/DRAFT-Cranes-COP.pdf	

Outcome for Activity 3	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 4

For the two (2) risks identified in Activity 3:

- Explain how you contribute to applying the techniques, tools and processes identified to assess the hazard
- Explain how you contribute to documenting the results of risk assessment
- Explain how the controls identified for each risk would consider the results of risk assessments

Risk	Applying techniques, tools and processes	Contribute to documenting the results of risk assessment	Consideration of results in risk control options
1	To involve by relevant workers, engineers and supervisors to access the hazards – this is the way to have both the "experienced" and "fresh" eye to conduct the inspection. To be sure that all hazards are found: • Look at all aspects of the work. • Include non-routine activities such as maintenance, repair, or cleaning. • Look at accident / incident / near-miss records. • Include people who work "off site" either at home, on other job sites, drivers, teleworkers, with clients, etc. • Look at the way the work is organised or "done" (include experience and age of people doing the work, systems being used, etc). • Look at foreseeable unusual conditions (for example: possible impact on hazard control procedures that may be unavailable in an emergency situation, power outage, etc.).	Keeping records of the assessment and any control actions taken is very important. Also it is required to store assessments for a specific number of years. Check for local requirements in local jurisdiction. The level of documentation or record keeping will depend on: • Level of risk involved. • Legislated requirements. • Requirements of any management systems that may be in place. The records should show that report are: • Conducted a good hazard review. • Determined the risks of those hazards. • Implemented control measures suitable for the risk. • Reviewed and monitored all hazards in the workplace.	In undertaking the review, consult workers involved in the confined space work and their health and safety representatives and consider the following questions: 1. Are the control measures working effectively in both their design and operation? 2. How effective is the risk assessment process? Are all hazards being identified? 3. Are workers actively involved in the risk management process? Are they openly raising health and safety concerns and reporting problems promptly? 4. Have new work methods or new equipment made the job safer? 5. Are safety procedures being followed? 6. Has instruction and training provided to workers been successful? 7. If new legislation or new information becomes available, does it indicate current controls may no longer be the most effective? 8. Is any change planned to any plant or structure that may create a confined space or change the nature of an existing confined space? 9. Has an incident occurred as a result of work carried out in a confined space?

2	To access the identified hazard via consultation with workers and supervisors who involved in the operation and access the work activities. Also, review the past relevant accident at the work place. Access the severity and likelihood of the incident using Technip risk matrix.	Keeping records of the assessment and any control actions taken is very important. Also it is required to store assessments for a specific number of years. Check for local requirements in local jurisdiction. The level of documentation or record keeping will depend on: •Level of risk involved. •Legislated requirements. •Requirements of any management systems that may be in place. The records should show that report are: •Conducted a good hazard review. •Determined the risks of those hazards. •Implemented control measures suitable for the risk. •Reviewed and monitored all hazards in the workplace.	The result of risk control option is considered by accessing: •Percentage of workforce exposed. •Frequency of exposure. •Degree of harm likely to result from the exposure. •Probability of occurrence. Then the priority, and important of the risk control would be identified to make sure the hazards are controlled.
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Outcome for Activity 4	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 5

For the two (2) risks (and associated risk controls) identified in Activity 3:

- a) Explain how you would contribute to developing and implementing a risk control plan
- b) Describe the process you would undertake to evaluate the risk controls that had been implemented

Risk	Develop and implement risk control plan	Evaluation of risk controls
1	To developed a confined space entry procedure, associated trainings such as permit to work (PTW), authorised entry personnel, Confined space campaign,safety talk about confined space.	Feedback session with the workers to evaluate the effectiveness of the control measures, analysis the breaches of safety rules, incidents and worker's HSE Observation card (U See U Act Card),compliance audit on the implementation of the agreed control measures
2	To developed a Lifting and hoisting procedure, associated trainings such as competent riggers and banksman, lifting campaign, safety talk about lifting hazards, stand down by top management to all riggers and banksman about the hazardous of lifting operation.	Feedback session with the workers to evaluate the effectiveness of the control measures, analysis the breaches of safety rules, incidents and worker's HSE Observation card (U See U Act Card),compliance audit on the implementation of the agreed control measures, invite lifting specialist to audit the lifting complaince at site

Outcome for Activity 5	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 6

Explain the requirements of your organisation regarding hazard identification, risk assessment and risk control activities by identifying the requirements found in:

- a) WHS policy
- b) WHS procedure
- c) WHS process
- d) WHS system

Explain how you comply with the requirements of these documents.

	WHS policy	WHS procedure	WHS process	WHS system
Hazard identification	Proactive in HSE response	To identify the hazard related to work activities and environment	To identify the hazard related to high risk activities	To identify the hazard related to work activities and environment prior applying the system. For example, Permit to work
How you comply	Identify the hazard associated to the jobs and working environment prior commencement of work	Identify the hazard associated to the jobs and working environment while carrying out high risk activity such as lifting a 10 ton panel	Identify the hazard associated to the high risk jobs and notify the safety personnel	Identify the hazard associated to the works at the specific working area and notify the permit to work approver
Risk assessment	Proactive in HSE response	To assess the risk of work activity	To assess the risk of the dangerous activity	To assess the risk of the identified hazard
How you comply	Assess the working area prior to commencement of work	Evaluate the severity and likelihood of the high risk activity and in new working area	To conduct JSA session together with all experienced person and those involved in the operation	To assess the severity and probability of the identified consequence of the hazard. Then priority the most top rank of risk activity.
Risk control	Proactive in HSE response	To identify all the relevant control measures to control the associated hazards	To identify all the relevant control measures of its hazard	To identify all the relevant control measures of its hazard
How you comply	To carry out necessary control measures to control the hazard and do housekeeping after work is	To communicate the hazards and control measures to the workers and make sure all the control measures agreed	Carry out all the control measures which agreed in the JSA session and make sure workers are complying it	To ensure all the control measures are in place prior the work is begin. Notify the safety personnel for the audit prior

	completed	are carried out accordingly		the work begin
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Outcome for Activity 6	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 7

Explain the requirements of your organisation regarding hazard identification, risk assessment and risk control activities by identifying the requirements found in:

- a) WHS Acts
- b) WHS Regulations
- c) Codes of practice
- d) Guidelines

Explain how you comply with the requirements of these documents.

	WHS Acts	WHS Regulations	Codes of practice	Guidelines
Hazard identification	Workplace Health and Safety act 2011, Section 49 (a), Part 5, Consultation, representation, and participation, Division 2, consultation stated that the PCBU shall provide consultation and information to the workers when the hazard is identified from associated work activities or working area	Workplace Health and Safety Regulation 2011, Chapter 3 General risk and workplace management, Managing risks to health and safety, Application of Specific requirements must be complied with, Section 34 Duty to identify hazards stated that a duty holder, in managing risks to health and safety, must identify reasonably foreseeable hazards that could give rise to risks to health and safety.	Managing electrical risk in workplace, under 2.1 identify required the relevant personnel to Identifying hazards involves finding all of the electrical tasks, situations and sequences of events that could potentially cause harm	General guideline for scaffolds and scaffolding work stated to identify the hazard which can cause harm to people
How you comply	To distribute the hazard to the workers via email, toolbox talk or display necessary information at notice board	To identify the foreseeable hazard of the work via HAZID workshop at each of construction phase	Identify the potential electrical hazards in a number of different ways including: 1. talking to workers and observing where and how electrical equipment is used 2. regularly inspecting and	Identify the hazard in several ways. for example, 1.observe the workplace to identify areas where scaffolds are used or scaffolding work is performed and where there is interaction with vehicles, pedestrians and

			testing electrical equipment and electrical installations as appropriate 3. reading product labels and manufacturers' instruction manuals 4. talking to manufacturers, suppliers, industry associations, and health and safety specialists 5. reviewing incident reports	fixed structures. 2. Look at the environment in which the scaffold is to be used including checking ground conditions. 3. Identify the major functional requirements of the scaffold like the maximum live and dead loads and access requirements.
Risk assessment	Workplace Health and Safety act 2011, Under division 13, regulation making powers, section 275 use of code of practice stated the the code of practise to assess the risk of the work	Workplace Health and Safety Regulation 2011, Division 3 Duties of person conducting business or undertaking, section 66 Managing risks to health and safety indicated that the risk assessment must be carried out by competent person	Managing electrical risk in workplace, under 2.2 assess the risk, stated that the risk assessment involves considering what could happen if someone is exposed to a hazard (consequence) and the likelihood of it happening. For work on energised electrical equipment, the WHS Regulations require that a risk assessment be prepared in writing by a competent person	General guideline for scaffolds and scaffolding work required the risk of scaffolding works to be assessed.
How you comply	To identify the hazard and evaluate the risk by using company risk matrix.	To include safety personnel, the workers and supervisors of the work in the risk assessment session for the	To asses the risk via approved risk matrix of company and make sure the risk assessment report is written	To carry out a risk assessment to identify the likelihood of somebody being harmed by the hazard and how

		specific task	by any competent person such as registered WHS officer	serious the harm could be. A risk assessment can help to determine what action should take to control the risk and how urgently the action needs to be taken
Risk control	Workplace Health and Safety act 2011, Under division 13, regulation making powers, section 275 use of code of practice stated the the code of practise to have risk control of the hazard	Workplace Health and Safety Regulation 2011, Chapter 3 General risk and workplace management, Managing risks to health and safety, Application of Specific requirements must be complied with, Section 36 Hierarchy of control measures stated that the duty holder, in minimising risks to health and safety, must implement risk control measures in accordance with this regulation.	Managing electrical risk in workplace, under 2.3 Control the risks required that once hazards have been identified and the risks assessed, appropriate control measures must be put in place. The ways of controlling risks are ranked from the highest level of protection and reliability to the lowest	General guideline for scaffolds and scaffolding work required take action to control the risk that is reasonably practicable to eliminate or minimise risks
How you comply	To identify the most suitable risk control of the hazard	To record down the agreed control measure in the risk assessment session and carry it out at site which to be monitored by safety personnel and the respective supervisor in charge	To identify the control measure based on the hierarchy of risk control which is from elimination, down to PPE usage as last solution.	The first thing to consider is whether hazards can be completely removed from the workplace. For example, risks can be eliminated by carrying out work at ground level or on completed floors of a building. If it is not reasonably practicable to completely eliminate the risk

				then consider the following options in the order they appear below to minimise risks, so far as is reasonably practicable: 1. substitute the hazard for something safer e.g. using mechanical aids like cranes, hoists, pallet jacks or trolleys to move equipment and materials wherever possible instead of manually lifting scaffolding 2. isolate the hazard from people e.g. install concrete barriers to separate pedestrians and powered mobile plant from scaffolds to minimise the risk of collision, and 3 use engineering controls e.g. provide toeboards, perimeter containment sheeting or overhead protective structures to prevent objects falling hitting workers or other people below the work area. If after implementing the above control measures a risk still remains, consider the
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				following controls in the order below to minimise the remaining risk, so far as is reasonably practicable: 4 use administrative controls e.g. storing scaffolding as close as practical to the work area to minimise the distance over which loads are manually moved, and 5. use personal protective equipment (PPE) e.g. hard hats, protective hand and footwear and high visibility vests. A combination of the controls set out above may be used if a single control is not enough to minimise the risks.
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Outcome for Activity 7☐ Satisfactory☐ Not satisfactory**Trainer/Assessor comments**

ACTIVITY 8

Identify two (2) parties who hold a duty within your workplace regarding hazards and risk control.

- a) Explain what they are obliged to do under the legislation
- b) Name the Act and relevant section of WHS legislation which imposes this obligation

	Name of individual or party	Obligations	Relevant section of WHS legislation
1	Management staff such as managers,	Management staff are accountable the duty as basically stated below: (a) the provision and maintenance of plant and systems of work that are, so far as is practicable, safe and without risks to health (b) the making of arrangements for ensuring, so far as is practicable, safety and absence of risks to health in connection with the use or operation, handling, storage and transport of plant and substances; (c) the provision of such information, instruction training and supervision as is necessary to ensure, so far as is practicable, the safety and health at work of his employees; (d) so far as is practicable, as regards any place of work under the control of the employer or self-employed person, the maintenance of it in a condition that is safe and without risks to health and the provision and maintenance of the means of access to and egress from it that are safe and without such risks; (e) the provision and maintenance of a working environment for his employees that is, so far as is practicable, safe, without risks to health, and adequate as regards facilities for their welfare at work.	According to Part 2 division 3 of Workplace health and safety regulation 2011,
2	Workers	The worker shall carry the duty as stated below while at work: (a) to take reasonable care for the safety and health of himself and of other persons who may be affected by his acts or omissions at work; (b) to co-operate with his employer or any other person in the discharge of any duty or	According to Part 2 division 4 of Workplace health and safety regulation 2011,

		requirement imposed on the employer or that other person by this Act or any regulation made thereunder; (c) to wear or use at all times any protective equipment or clothing provided by the employer for the purpose of preventing risks to his safety and health; and (d) to comply with any instruction or measure on occupational safety and health instituted by his employer or any other person by or Workplace health and safety regulation 2011 or any regulation made thereunder.	
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Outcome for Activity 8	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

ACTIVITY 9

Explain how the following fit into, and are addressed in a WHS management system (WHSMS):

- a) Hazard identification
- b) Risk assessment
- c) Risk control

Aspect	Place in WHSMS
Hazard identification	Technip will be using the hazard prompt 10 + 1 method to identify the hazards that relevant to the production or specific activity throughout its total cycle or parts thereof. The team who conducted the hazard identification process shall at least review each of the 10+1 hazards prompt in ensuring that all the hazards during the activity being recognized. Hazard prompt 10 + 1 are: 1) Biological e.g. legionella, bacteria, spores and blood borne 2) Thermal e.g. heat, fire, spark and explosion 3) Motion e.g. running fan, rotating equipments and moving vehicle 4) Gravity e.g. working at height, suspended load and loose items 5) Chemical e.g. propane, acetylene, argon and paint 6) Weather e.g. heavy rain and strong wind 7) Radiation e.g. ionizing radiation, gamma rays and UV light 8) Body mechanics e.g. manual lifting, pushing and climbing 9) Pressure e.g. cranes hydraulics systems, gas cylinders and gas/liquid under pressure, 10) Electrical e.g. Junction boxes, HV cables and welding cables 11) Invisible hazards- A hazard that might not be sensed or physically felt. e.g. competency, workload or time pressure.
Risk assessment	All risk associated with the hazards identified should be evaluated and assessed based on the established level of risk and deciding whether or not the risk is tolerable. Technip will be using 5 x 5 Risk Assessment Matrix and each risk shall be assessed to determine a measure of the effect on people, asset, environment and reputation with four risk level; low, medium, high and intolerable.
Risk control	Prevention and control measures shall be developed to reduce the risk, if the risk is deemed intolerable. Preventive and protective measures should be implemented in the following order of priority: i) Eliminate the hazard / risk, and where elimination is not possible. ii) Substitute the hazard / risk by replacing it with one that presents a lower risk. iii) Isolate the hazard / risk by separating it from other people. iv) Control the hazard / risk at source, through the use of engineering controls v) Minimize the hazard / risk the design of safe work systems which include administrative control measures vi) Where residual hazards / risks cannot be controlled by collective measures, the employer should provide for appropriate personal protective equipment.

	Moreover, Technip used Permit to work (PTW) to control the high risk activities and also enforced Job Safety Analysis to be in place for all kind of routine and non routine activities.
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Outcome for Activity 9	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	

Outcome for On-line Quiz	☐ Satisfactory ☐ Not satisfactory
Trainer/Assessor comments	