T-LEVELS | Institute for Apprenticeships & Technical Education

T Level Technical Qualification in Healthcare Science

Occupational specialism assessment (OSA)

Assisting with Healthcare Science

Assignment 3

Mark scheme

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T Level Technical Qualification in Healthcare Science
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Introduction

This mark scheme has been written by the assessment writer and refined, alongside the relevant questions, by a panel of subject experts through the external assessment writing process and at standardisation meetings.

The purpose of this mark scheme is to give you:

- criteria of the observed skills expected from a student
- information on how individual marks are to be awarded
- the allocated performance outcomes and total mark for each task

Marking guidelines

The mark scheme for the practical assignment comprises marking grids and indicative content.

The following marking grids should be used to assess students and award marks for their skills and underpinning knowledge. The indicative content included is for the practical assignment set for the (insert series) series only.

To understand what is required to be awarded marks, students should have already been provided with a copy of the marking grids. The marking grids are published in the tutor guidance document which can be found at www.qualhub.co.uk.

Assessors are reminded that they should complete an observation record form to record descriptive information and evidence of the student's skills and knowledge demonstrated during the practical assignment. The student observation record form can be found within this document for each task.

General guidelines

You must apply the following marking guidelines to all marking undertaken throughout the observation. This is to ensure fairness to all students, who must receive the same treatment.

You must mark the first student in exactly the same way as you mark the last:

- the mark scheme must be referred to throughout the marking period and applied consistently; do not change your approach to marking once you have been standardised
- reward students positively giving credit for what they have shown, rather than what they might have omitted
- utilise the whole mark range and always award full marks when the response merits them
- be prepared to award zero marks if the student's response has no creditworthy material
- do not credit irrelevant material that does not answer the question, no matter how impressive the response might be
- the marks awarded for each response should be clearly and legibly recorded in the grid on the front of the question paper
- if you are in any doubt about the application of the mark scheme, you must consult with your team leader or the chief examiner

Guidelines for using extended response marking grids

The marking grids for each task include a number of themes or criteria that students are assessed against. Each assessment criterion contributes, with equal weighting, to an overall holistic judgement of their performance.

The assessment criteria are broken down into (up to) 5 bands with a corresponding descriptor for each criterion. The descriptor for the band indicates the quality of a student's performance in that band. The band is the mark that should be awarded across the criterion, for example, band 1 = 1 to 4 marks and band 4 = 13 to 16 marks. There is a total of 16 marks available for this part of the task.

When determining marks for a student's performance, assessors should only consider the quality of the student's performance that has been observed. When determining a band/mark, assessors' decisions should be based on the overall quality of the student's performance in relation to the descriptors from that part of the task. If the student's performance covers different aspects of different bands, assessors should use a best-fit approach to award the most appropriate band/mark.

Standardisation materials can be used to help assessors with determining a band/mark if they are unsure.

Assessors should start at the lowest band of the marking grid and move up until there is a match between the band descriptor and the student's performance.

Indicative content

Indicative content has been provided as a guide to help assessors understand what should be expected in a student's performance to allow for a marking judgement to be made. Assessors are reminded that indicative content is not an exhaustive list but aims to cover the main elements expected to be observed.

Practical skills assessment

This assessment requires students to complete the following tasks:

1. microscopy – Gram stain
2. specimen analysis – blood

Task 1: microscopy – Gram stain

Brief

Location: microbiology laboratory

You are working as a healthcare science assistant in the microbiology department. The biomedical scientist has requested that you prepare positive and negative quality control slides for Gram stains. Control cultures are available in the department. You are required to prepare the slides using the standard operating procedure (SOP) provided and check that they are fit for purpose before passing back to the biomedical scientist for checking.

Task

Prepare the control Gram stain slides using the appropriate control cultures.

1(a): prepare your work area and self for Gram staining

1(b): prepare slides for Gram staining

1(c): carry out Gram staining on the prepared slides following the SOP provided and record the results

1(d): dispose of materials and clean equipment and work area

(40 marks)

Observation record form

Descriptive information and evidence of students' skills during the practical assignment. Even though evidence of the quality of skills demonstrated should support decisions against the mark scheme, the notes should follow the flow of the tasks and how students are expected to complete them, rather than attempting to assign evidence against the criteria (at this stage).

To be completed by the provider appointed assessor

Area/objective The following areas/objectives can cover a broad range of skills or actions which should be considered when adding notes. The text below each area/objective is an example of what should be observed and is not exhaustive.	**Comments** Identifying students' areas of strengths and weaknesses through the use of thorough and precise notes that differentiate between a range of students' practical skills is required. This will be used to support accurate and consistent allocation of marks once all evidence had been generated.
Preparation For example, describe how the student collects and applies correct PPE, prepares work area to ensure it is safe, tidy and clean.	
Quality control (QC) checking For example, describe how the student checks and selects the control cultures before starting the slide preparation.	
Slide preparation For example, describe how the student prepares the slides for examination.	
Gram staining For example, describe how the student carries out the Gram staining process.	
Microscope use For example, describe how the student uses a microscope to check the slide.	

Quality checks For example, describe how the student carries out the quality checking process.	
Reporting/recording results For example, describe how the student carries out the handover of the QC slides to the biomedical scientist.	
Clean down For example, describe how the student cleans down the workstation and disposes of waste and PPE.	

Task 1(a): preparation (work area and self)

Band	Level descriptor
Band 3 (7–9 marks)	The student adheres to health and safety regulations when demonstrating hygiene techniques, selecting appropriate PPE to an **excellent** standard. The student demonstrates **excellent** understanding and practical application when preparing their work area for the control Gram stain slides, selecting all relevant equipment and reagents, and ensures excellent levels of cleanliness and organisation of the work area. The student demonstrates **excellent** knowledge and understanding when identifying equipment and QC materials required for the control Gram stain slides.
Band 2 (4–6 marks)	The student adheres to health and safety regulations when demonstrating hygiene techniques, selecting appropriate PPE to a **good** standard. The student demonstrates **good** understanding and practical application when preparing their work area for the control Gram stain slides, selecting mainly relevant equipment and reagents, and ensures good levels of cleanliness and organisation of the work area. The student demonstrates **good** knowledge and understanding when identifying equipment and QC materials required for the control Gram stain slides.
Band 1 (1–3 marks)	The student adheres to health and safety regulations when demonstrating hygiene techniques and selecting appropriate PPE to a **reasonable** standard. The student demonstrates **basic** understanding and practical application when preparing their work area for the control Gram stain slides, selecting some limited relevant equipment and reagents, and ensures reasonable levels of cleanliness and organisation of the work area. The student demonstrates **basic** knowledge and understanding when identifying equipment and QC materials required for the control Gram stain slides, and may require support/prompting.
0	No evidence demonstrated or nothing worthy of credit.

Indicative content

The student should:

(Health and safety: hygiene)

- demonstrate all of the 5 steps of hand hygiene
- use soap and water or sanitiser where appropriate

- wash hands for an effective amount of time

(Health and safety: select appropriate PPE)

- use disposable gloves
- wear a laboratory coat

(Health and safety: select and prepare area for work)

- work in an organised/cleared area
- clean work area with cleaning solution

(Scientific practice: select and prepare equipment, reagents and QC material)

- select equipment such as slide racks, glass slides, reagent trough, inoculation loop, microscope, heat source (hot plate) and timer
- select reagents such as stain, decolouriser and counterstain
- select QC material such as Gram-positive and Gram-negative cultures

Task 1(b): preparation (slides)

Band	Level descriptor
Band 3 (7–9 marks)	The student's preparation of the slides is **excellent**, covering all necessary steps in a **confident** manner and with attention to detail, including accurate labelling of slides. The student demonstrates **excellent** application of the QC material, applying the correct amount to both slides. The student is **precise** when heat fixing the slides, which is completed to a **high** standard, the material firmly adheres to both slides.
Band 2 (4–6 marks)	The student's preparation of the slides is **good**, covering all necessary steps and with **good** attention to detail, including accurate labelling of slides. The student demonstrates **good** application of the QC material, **mostly** applying the correct amount to both slides. The student is **mostly precise** when heat fixing the slides, which is completed to a **good** standard, the material partially adheres to both slides.
Band 1 (1–3 marks)	The student's preparation of the slides is basic and limited, covering **most** steps but with **limited** attention to detail and some inaccuracies in labelling. The student demonstrates basic application of the QC material and requires some support from the biomedical scientist to apply the correct amount of material to the slides. The student is **partially accurate** when heat fixing the slides, which is completed to a **basic** standard, the material partially adheres to one slide.

Indicative content

The student should:

(Scientific practice: label slides)

- carry out identification of slides with date, initials and positive or negative control label

(Scientific practice: application of QC material)

- use correct volume of QC material
- apply positive and negative culture on correctly labelled slide
- correctly use a sterile inoculating loop using aseptic technique

(Scientific practice: accurate heat fixing)

- use an appropriate heat source such as heat plate
- ensure the slides are fixed

Task 1(c): Gram staining

Band	Level descriptor
Band 4 (13–16 marks)	The student demonstrates **excellent** techniques when completing the Gram stain, that are **sustained** throughout the SOP, using the correct volume of stain for the correct time, and including correct use of slides. The student demonstrates **excellent** practical skills when using the microscope, that are **always** applied with accuracy and precision when determining the presence of Gram stained bacteria, including correct oil, objectives and a high level of confidence in focussing adjustment. The student's acquisition of data and/or information is **excellent**, and is **fully accurate** when recording results. The student demonstrates **excellent** communication skills, ensuring the use of **highly appropriate** and fully accurate technical language when providing information to the biomedical scientist.
Band 3 (9–12 marks)	The student demonstrates **very good** techniques when completing the Gram stain, that are **largely sustained** throughout the SOP, mostly using the correct volume of stain for the correct time, and including correct use of slides. The student demonstrates **very good** practical skills when using the microscope, that are **mostly** applied with accuracy and precision when determining the presence of Gram stained bacteria, including some of the following: correct oil, objectives and good confidence in focussing adjustment. The student's acquisition of data and/or information is **very good** and is **generally** accurate when recording results. The student demonstrates **very good** communication skills, ensuring the use of **appropriate** and accurate technical language when providing information and reporting to the biomedical scientist.
Band 2 (5–8 marks)	The student demonstrates **good** techniques when completing the Gram stain, that are **sometimes applied** during the SOP, using stain in a reasonably good way, and including the correct use of slides. The student demonstrates **good** practical skills when using the microscope, that are applied with some accuracy and precision when determining the presence of Gram stained bacteria, including the use of oil, objectives and some reasonable confidence in focussing adjustment in a generally correct way but with some errors or inaccuracies. The student's acquisition of data and/or information is **good** and is **partially accurate** when recording results. The student demonstrates **good** communication skills, with **some** use of appropriate technical language that is **partially accurate** when providing information and reporting to the biomedical scientist.

Band	Level descriptor
Band 1 (1–4 marks)	The student demonstrates **basic** techniques when completing the Gram stain, that are **inconsistently, and only in a limited way, applied** during the SOP, with some use of stain, and including some use of slides. The student demonstrates **basic** practical skills when using the microscope, that are applied with basic or limited accuracy and precision, including some basic use of oil, objectives and focussing adjustment that may lack confidence and include errors. The student may require assistance when determining the presence of Gram stained bacteria. The student's acquisition of data and/or information is basic and limited, recording results with some, but **limited accuracy**. The student demonstrates **basic** communication skills, with **basic** use of appropriate technical language that is limited in accuracy, when providing information and reporting to the biomedical scientist. The student requires prompting when incomplete information has been provided.
0	No evidence demonstrated or nothing worthy of credit.

Indicative content

The student should:

(Scientific practice: Gram stain technique using SOP)

- use correct volume of stain and decolouriser
- use appropriate time for stain and decolouriser
- ensure slides are dry

(Scientific practice: use of microscope)

- use immersion oil and correct objective x100
- use the correct focussing adjustment

(Management of information and data: recording and documentation of results)

- use a prepared written/electronic table for accurate recording of results

(Communication skills: verbal communication of results to supervising BMS)

- use written/electronic methods to confirm the result
- use verbal methods to explain the procedure completed

Task 1(d): dispose of materials and clean equipment and work area

Band	Level descriptor
Band 3 (5–6 marks)	The student's adherence to health and safety regulations when disposing of **all** materials is **comprehensive**, including correct and confident disposal of biological materials and glassware. The student **consistently** monitors and maintains their working environment, demonstrating **highly effective** infection control procedure compliance.
Band 2 (3–4 marks)	The student's adherence to health and safety regulations when disposing of **most** materials is good, including correct disposal of biological materials and glassware. The student **predominately** monitors and maintains their working environment, demonstrating **reasonably effective** infection control procedure compliance.
Band 1 (1–2 marks)	The student's adherence to health and safety regulations when disposing of **some** materials is **basic**, with some, but limited consideration of different materials and how they should be disposed of. The student demonstrates **some limited** monitoring and maintenance of their working environment, demonstrating **basic and limited** infection control procedure compliance.
0	No evidence demonstrated or nothing worthy of credit.

Indicative content

The student should:

(Correct disposal of biological material and glassware)

- correctly dispose of biological material into appropriate waste container ready for autoclave
- correctly dispose of glassware in the sharps bin

(Decontamination of work area and equipment)

- use cleaning fluid when decontaminating the work area

(Correct disposal of PPE)

- use clinical waste bin for gloves and laundry for laboratory coat

Task 2: specimen analysis – blood

Brief

Location: pathology department

You are working in pathology as a healthcare science assistant in the virology department of a hospital, supporting a biomedical scientist (BMS).

Your team receives 2 samples for hepatitis B antibody detection.

Task

The biomedical scientist has asked you to check 2 blood samples to confirm suitability for testing for a hepatitis B antibody screen.

2(a): prepare the work area and self for carrying out a hepatitis B enzyme-linked immunosorbent assay (ELISA) on a blood sample

2(b): check sample suitability and prepare sample for the ELISA

2(c): prepare reagents and quality control (QC) material for ELISA, including:

- following the SOP
- confirming the specimen is ready for analysis
- discussing the process you went through with the biomedical scientist

2(d): carry out post-analysis activities, including:

- sample storage
- equipment cleaning
- waste disposal
- decontamination of work area

(54 marks)

Observation record form

Descriptive information and evidence of students' skills during the practical assignment. Even though evidence of the quality of skills demonstrated should support decisions against the mark scheme, the notes should follow the flow of the tasks and how students are expected to complete them, rather than attempting to assign evidence against the criteria (at this stage).

To be completed by the provider appointed assessor

Area/objective The following areas/objectives can cover a broad range of skills or actions which should be considered when adding notes. The text below each area/objective is an example of what should be observed and is not exhaustive.	**Comments** Identifying students' areas of strengths and weaknesses through the use of thorough and precise notes that differentiate between a range of students' practical skills is required. This will be used to support accurate and consistent allocation of marks once all evidence has been generated.
Preparation For example, describe how well the student collects and applies correct PPE and prepares the work area to ensure it is safe, tidy and clean.	
Checking sample For example, describe how well the student checks the sample before starting the processing procedure.	
Centrifugation For example, describe how well the student uses the centrifuge to separate blood into components.	
Serum preparation For example, describe how well the student prepares and stores the sample for the next stage of processing.	
ELISA preparation For example, describe how accurately the student carries out the appropriate steps when following the SOP for the ELISA test.	

Pipette use For example, describe how well the student uses a pipette throughout the process.	
Setting up a control For example, describe how well the student sets up controls for the ELISA test experiment.	
Results reporting For example, describe how well the student reports the ELISA preparation.	
Task completion For example, describe how well the student finishes the task, such as storing, disposing sample and tidying work area.	

Task 2(a): prepare the work area and self for carrying out a hepatitis B enzyme-linked immunosorbent assay (ELISA) on a blood sample

Band	Level descriptor
Band 3 (7–9 marks)	The student adheres to health and safety regulations, demonstrates excellent hygiene techniques, including all aspects of hand hygiene, and selects an appropriate range of PPE aligned to the task to a **very high** standard. The student demonstrates **excellent** understanding and practice when preparing their work area for the ELISA, including correct equipment, reagents and QC material. The student demonstrates **excellent** knowledge and practice when identifying and preparing equipment with no prompting required.
Band 2 (4–6 marks)	The student adheres to health and safety regulations, demonstrates good hygiene techniques, including hand hygiene, and selects the appropriate PPE, mostly aligned to the task, to a **good** standard. The student demonstrates **good** understanding and practice when preparing their work area for the ELISA, including mostly correct equipment, reagents and QC material. The student demonstrates **good** understanding and practice when identifying relevant equipment, reagents and QC materials required for the ELISA.
Band 1 (1–3 marks	The student shows some limited ability to follow health and safety regulations when demonstrating hygiene techniques and selecting appropriate PPE to a **reasonable** standard. The student demonstrates **some** understanding and practice when preparing their work area for the ELISA, including basic knowledge of some relevant equipment, reagents and QC material. The student demonstrates **some** understanding and practice when identifying relevant equipment, reagents and QC materials required for the ELISA, and may require support/prompting when unable to identify a required item.
0	No evidence demonstrated or nothing worthy of credit.

Indicative content

The student should:

(Health and safety: hygiene)

- use soap and water or sanitiser where appropriate
- demonstrate all of the 5 steps of hand hygiene
- wash hands for an effective amount of time

(Health and safety: select appropriate PPE)

- use a laboratory coat
- use gloves
- use goggles

(Health and safety: select and prepare area for work)

- work in an area that is cleared and organised
- clean work area with cleaning solutions

(Scientific practice: select and prepare equipment, reagents and QC material)

- use correct equipment such as centrifuge, pipettes, pipette tips, reagent trough and timer
- select required reagents such as specimen diluent, conjugate, chromogen solution, stop solution and wash buffer
- select QC material such as known positive and known negative controls

Task 2(b): check suitability and prepare sample for the ELISA

Band	Level descriptor
Band 4 (13–16 marks)	The student demonstrates **very high levels of** accuracy when examining the sample suitability and identifies and manages the specimen error **highly effectively** in the context of the requirements of the task. The student demonstrates **excellent** use of the LIMS that is **consistently** accurate and complete with information, very accurately processing sample details and generating unique labels. The student demonstrates **excellent** use of the LIMS that is **consistently** accurately and fully completed. The student's sample labelling is **consistently** accurate and correctly placed. The student demonstrates **excellent** use of the centrifuge and pipette, that is **consistently** applied with accuracy and precision, including operation of the centrifuge including bucket size, balance, speed and timing of centrifugation, and excellent accuracy and dispensing when using the pipette.
Band 3 (9–12 marks)	The student demonstrates **high levels of** accuracy when examining the sample suitability and identifies and manages the specimen error **effectively** in the context of the requirements of the task. The student demonstrates **very good** use of the LIMS that is **generally** accurate and completed, processing sample details and generating unique labels with good accuracy. The student's sample labelling is **generally** accurate and correctly placed. The student demonstrates a **very good** use of the centrifuge and pipette, that is **mostly** applied with accuracy and precision, including very good operation of the centrifuge including bucket size, balance, speed and timing of centrifugation, and accuracy and dispensing when using the pipette.
Band 2 (5–8 marks)	The student demonstrates **good levels of** accuracy when examining the sample suitability and identifies and manages the specimen error **reasonably effectively** in the context of the requirements of the task. The student demonstrates **reasonable** use of the LIMS that is **partially** accurate and complete with information, processing sample details and generating unique labels with some accuracy. The student's sample labelling is **partially** accurate and correctly placed. The student demonstrates **reasonable** use of the centrifuge and pipette, that is **sometimes** applied with accuracy and precision, including reasonable operation of the centrifuge including bucket size, balance, speed and timing of centrifugation, and accuracy and dispensing when using the pipette.

Band	Level descriptor
Band 1 (1–4 marks)	The student demonstrates **basic levels of** accuracy when examining the sample suitability and identifies and manages the specimen error with some limited effectiveness in the context of the requirements of the task. The student demonstrates **limited** use of the LIMS that is **in places** accurate and completed, processing sample details and generating unique labels with limited accuracy. The student's sample labelling is **at times** accurate and correctly placed. The student demonstrates **limited** use of the centrifuge and pipette, that is applied with basic and limited accuracy and precision, and requires assistance, including some limited operation of the centrifuge including bucket size, balance, speed and timing of centrifugation, and accuracy and dispensing when using the pipette.
0	No evidence demonstrated or nothing worthy of credit.

Indicative content

The student should:

(Scientific practice: sample suitability)

- examine sample for suitability such as correct volume, container and labelling
- identify unsuitable samples such as incorrect/leaking container, missing information, haemolysed or under filled samples
- dispose of unsuitable samples into clinical waste bin, adding comments in LIMS noting disposal
- inform the BMS of the faulty sample and reasons for disposal (recognise when to escalate concerns and technical difficulties with specimens)

(Management of information and data recording: data entry onto LIMS)

- process sample details including hospital number, date of birth, full name and test requested onto LIMS
- generate a unique label for each sample

(Scientific practice: sample labelling)

- use 3 points of identification on each sample to confirm sample identity
- use generated label to uniquely identify each sample

(Scientific practice: centrifugation)

- correctly use the centrifuge, including duration, bucket size and correct use of balance and speed of centrifugation

(Scientific practice: aliquot using pipette)

- apply an accurate pipetting technique for aliquoting correct blood sample
- use single-use pipette or pipette tip
- use sufficient volume
- use correct labelling of aliquot container/tube

Task 2(c): prepare reagents and quality control (QC) material for ELISA

Band	Level descriptor
Band 5 (17–20 marks)	The student demonstrates **excellent** knowledge, understanding and skills when preparing the reagents and QC materials, following all steps/stages of the SOP. The student demonstrates **excellent** pipette skills, including selection, correct volume, single-use tips and no air bubbles, that are **consistently** applied with accuracy and precision. The student demonstrates **excellent** communication skills, with **excellent** use of technical language when providing information and reporting to the biomedical scientist, conveying all the key points required in a highly efficient and confident way.
Band 4 (13–16 marks)	The student demonstrates **very good** knowledge, understanding and skills when preparing the reagents and QC materials, following most steps/stages of the SOP. The student demonstrates **very good** pipette skills, including selection, correct volume, single-use tips and no air bubbles, that are **mostly** applied with accuracy and precision. The student demonstrates **very good** communication skills, with a **very good** use of technical language when providing information and reporting to the biomedical scientist, conveying all the key points required.
Band 3 (9–12 marks)	The student demonstrates **good** knowledge, understanding and skills when preparing the reagents and QC materials, following some steps/stages of the SOP. The student demonstrates **good** pipette skills, including selection, correct volume, single-use tips and no air bubbles, that are **generally** applied with accuracy and precision. The student demonstrates **good** communication skills, with a **good** use of technical language when providing information and reporting to the biomedical scientist, conveying most of the key points.

Band	Level descriptor
Band 2 (5–8 marks)	The student demonstrates **reasonable** knowledge, understanding and skills when preparing the reagents and QC materials, following a few steps/stages of the SOP. The student demonstrates **reasonable** pipette skills, including selection, correct volume, single-use tips and no air bubbles, that are **inconsistently** applied with accuracy and precision. The student demonstrates **reasonable** communication skills, with a **moderate** use of technical language when providing information and reporting to the biomedical scientist, conveying some of the key points.
Band 1 (1–4 marks)	The student demonstrates **basic or limited** knowledge, understanding and skills when preparing the reagents and QC materials, inconsistently following the steps/stages of the SOP. The student demonstrates **basic or limited** pipette skills, including selection, that are **at times** applied with accuracy and precision. The student demonstrates **basic or limited** communication skills, with a **limited** use of technical language when providing information and reporting to the biomedical scientist, and with only basic or limited information conveyed.
0	No evidence demonstrated or nothing worthy of credit.

Indicative content

The student should:

(Scientific practice: correct use of SOP)

- follow instructions using the SOP

(Scientific practice: select and use correct pipette for reagent and sample preparation)

- select sample, reagents and QC
- select appropriate pipettes
- apply good pipette techniques such as correct volume, single-use tips and no air bubbles
- dispose of pipettes/tips appropriately

(Communication skills: verbal communication of completed preparation to BMS)

- communicate method used verbally

Task 2(d): carry out post-analysis activities

Band	Level descriptor
Band 3 (7–9 marks)	The student's adherence to health and safety regulations when disposing of **all** materials, including disposables, is **excellent** and **comprehensive,** including confident use of correct clinical waste bins. The student's adherence to local laboratory regulations when storing samples is **excellent** and **comprehensive**, and takes into account all relevant health and safety and local laboratory regulations. The student **consistently** monitors and maintains their working environment, demonstrating **highly effective** infection control procedure compliance.
Band 2 (4–6 marks)	The student's adherence to health and safety regulations when disposing of **all** materials, including disposables, is **good** and meets most of the key requirements, including correct use of correct clinical waste bins. The student's adherence to local laboratory regulations when storing samples is **good** and meets most of the key requirements, and takes into account most relevant health and safety and local laboratory regulations. The student predominately monitors and maintains their working environment, demonstrating **reasonably effective** infection control procedure compliance.
Band 1 (1–3 marks)	The student's adherence to health and safety regulations when disposing of **all** materials, including disposables, is **basic**, with some limited understanding and use of correct clinical waste bins. The student's adherence to local laboratory regulations when storing samples is **limited,** and takes into account some relevant health and safety and local laboratory regulations. The student demonstrates **some limited** monitoring and maintenance of their working environment, demonstrating **basic and limited** infection control procedure compliance.
0	No evidence demonstrated or nothing worthy of credit.

Indicative content

The student should:

(Health and safety: correct disposal of biological material)

- place biologically contaminated material into clinical waste bin

(Health and safety: correct disposal of materials such as disposal pipette tips and reagents)

- dispose of pipette/pipette tips and reagents into clinical waste bin

(Scientific practice: correct storage of samples post-analysis)

- store sample, post-analysis, in line with existing laboratory policy/national guidelines

(Health and safety: decontamination of work area and equipment)

- use correct cleaning solution for decontaminating the work area and equipment

(Health and safety: correct disposal of PPE)

- dispose of gloves into clinical waste bin

Breakdown of available marks

Task	Number of marks available
Task 1: microscopy – Gram stain	40
Task 2: specimen analysis – blood	54
Total marks	94

Document information

The T Level Technical Qualification is a qualification approved and managed by the Institute for Apprenticeships and Technical Education.

Owner: Head of Assessment Design

Change History Record

Version	Description of change	Approval	Date of Issue
v1.0	Post approval, updated for publication.		January 2021
v1.1	NCFE rebrand.		September 2021