T Level Technical Qualification in Healthcare Science

Occupational specialism assessment (OSA)

Assisting with Healthcare Science

Assignment 3

Mark scheme

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Contents

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 Summer 2023 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 on the NCFE website.

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 0marks 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
- 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:

Task 1: Microscopy – Gram stain

Task 2: Specimen analysis – blood

Duration 2 hours 30 minutes

Task 1: microscopy – Gram stain

Brief

Location: microbiology laboratory

You are working as a healthcare science assistant in the microbiology department within a hospital.

A patient has been diagnosed with a urinary tract infection which was treated with penicillin (effective against Gram-positive bacteria) but has shown no improvement. The doctor has sent a sample to you for testing and requested a Gram stain be performed to determine the Gram status of the bacteria. They are concerned that since the previous treatment was ineffective the infection may be due to either an antibiotic-resistant Gram-positive bacteria, or a Gram-negative bacteria

You are required to prepare the slides using the standard operating procedure (SOP) provided and examine the slides to determine whether the bacteria in the sample are Gram positive or Gram negative. These results will then be confirmed by the biomedical scientist.

Task

Prepare the sample Gram stain slides using the patient sample cultures.

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

1(b) prepare three slides for Gram staining

1(c) carry out Gram staining on the prepared slides following the SOP provided and record the results using the table provided and notify the biomedical scientist (BMS)

- include an explanation of how you completed the sample Gram stain

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.
Health and safety: personal protective equipment (PPE) Describe how the student uses appropriate PPE.	
Health and safety: environment Describe how the student prepares work area to ensure it is safe, tidy and clean.	
Slide preparation Describe how the student prepares the slides for examination.	
Gram staining Describe how the student carries out the Gram staining process.	
Microscope use Describe how the student uses a microscope to check the slide.	
Reporting/recording results Describe how the student carries out the handover of the slides to the biomedical scientist.	

Post task Describe how the student cleans down the workstation and disposes of waste and PPE.	

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

	clinical and scientific practice	health and safety	infection control
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 materials required for the control Gram stain.		
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 materials required for the control Gram stain.		
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 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 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
- identifying and selecting correct sample material

Task 1(b) - preparation (slides)

	scientific preparation	health and safety	record keeping
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 **excellent** attention to detail, including **accurate** labelling of slides. The student demonstrates **excellent** application of the sample 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 sample 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**, covering **most** steps but with **limited** attention to detail and **some inaccuracies** in labelling the slides. The student demonstrates **basic** application of the sample 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.		
0	No evidence demonstrated or nothing worthy of credit.		

Indicative content

The student should:

Scientific practice (label slides):

- carry out identification of slides with date, initials and label

Scientific practice (application of sample material):

- use correct volume of sample material
- correctly use a sterile disposable inoculating loop using aseptic technique

Scientific practice (accurate heat fixing):

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

Task 1(c) - Gram staining

	scientific technique	data collection and recording	communication skills
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.		

	scientific technique	data collection and recording	communication skills
Band	**Level descriptor**		
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 1 (1–4 marks)	The student demonstrates **basic** techniques when completing the Gram stain, that are **inconsistently** 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** 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,** 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
- identify the bacteria as Gram negative

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

	attention to detail	hygiene standards	knowledge of safe practice
Band	**Level descriptor**		
Band 3 (5–6 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 (3–4 marks)	The student's adherence to health and safety regulations when disposing of all materials, including disposables is **good**, including correct use of correct clinical waste bins. The student's adherence to local laboratory regulations when storing samples is **good** 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 (1–2 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 **basic** and considers **some** relevant health and safety and local laboratory regulations. The student demonstrates some **basic** monitoring and maintenance of their working environment, demonstrating **basic** 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 biomedical department of a hospital, supporting a biomedical scientist (BMS).

The lab has been sent 2 blood samples from a patient who is suspected of having an autoimmune inflammatory disorder. The clinician has requested that their levels of inflammatory marker protein Interleukin-6 are determined by ELISA to help their decision about whether a therapy targeting interleukin-6 would be beneficial.

Your team receives 2 samples taken from the patient for Interleukin-6 quantification by ELISA.

Task

The biomedical scientist has asked you to check the 2 blood samples to confirm suitability for testing for Interleukin-6 levels by ELISA

2(a): prepare the work area and self for carrying out an Interleukin-6 enzyme-linked immunosorbent assay (ELISA) on the blood samples

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

2(c): prepare reagents and reference curve material for ELISA, including:

- following the SOP
- record the plate details in the LIMS system (starting with the ‘Dashboard’ sheet and working through each sheet adding in all relevant information until complete)
- inform the biomedical scientist that the plate is ready for analysis

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.
Health and safety: personal protective equipment (PPE) Describe how the student uses appropriate PPE.	
Health and safety: environment Describe how the student prepares work area to ensure it is safe, tidy and clean.	
Checking sample Describe how well the student checks the sample before starting the processing procedure.	
ELISA preparation Describe how accurately the student carries out the appropriate steps when following the SOP for ELISA.	
Pipette use Describe how well the student uses a pipette throughout the process.	

Results reporting Describe how well the student reports/records ELISA preparation.	
Task completion Describe how well the student finishes the task, such as storing, disposing sample and tidying work area.	
Post task Describe how the student cleans down the workstation and disposes of waste and PPE.	

Task 2(a) - prepare yourself and the work area for carrying out preparation of Interleukin-6 enzyme-linked immunosorbent assay (ELISA) on a blood sample

	clinical and scientific practice	health and safety	infection control
Band			
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 sample preparation, including **correct** equipment, and consumables. 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 sample preparation, including **mostly correct** equipment and consumables. The student demonstrates **good** understanding and practice when identifying relevant equipment.		
Band 1 (1–3 marks)	The student shows some **basic** ability to follow health and safety regulations when demonstrating hygiene techniques, including **basic** aspects of hand hygiene and selecting appropriate PPE to a **reasonable** standard. The student demonstrates **some** understanding and practice when preparing their work area for sample preparation, including **basic** knowledge of **some** relevant equipment and consumables. The student demonstrates **basic** understanding and practice when identifying relevant equipment and may require support/prompting when unable to identify a required item.		

	clinical and scientific practice	health and safety	infection control
Band			
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 material):

- use correct equipment such as pipettes, pipette tips, reagent trough, microcentrifuge tubes and 96 well plate
- select required reagents such as specimen diluent, reference material and samples

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

	scientific technique	data collection and recording
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's sample labelling is **consistently** accurate and correctly placed. The student demonstrates **excellent** use of the pipette, that is **consistently** applied with accuracy and precision, 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's sample labelling is **generally** accurate and correctly placed. The student demonstrates a **very good** use of the pipette, that is **mostly** applied with accuracy and precision, 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's sample labelling is **partially** accurate and correctly placed. The student demonstrates **good** use of the pipette, that is **sometimes** applied with accuracy and precision, and accuracy and dispensing when using the pipette.	
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's sample labelling is **at times** accurate and correctly placed. The student demonstrates **basic** use of the pipette, that is applied with **basic** accuracy and precision, and **requires assistance.**	

	scientific technique	data collection and recording
Band	**Level descriptor**	
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

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 (aliquot using pipette):

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

Task 2(c) - prepare reagents and reference material for ELISA

	scientific practice and technical skill	application of SOP	communication skills
Band	**Level descriptors**		
Band 5 (17–20 marks)	The student demonstrates **excellent** knowledge, understanding and skills when preparing the reagents and materials, following all steps/stages of the SOP. 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 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 materials, following most steps/stages of the SOP. 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 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 materials, following some steps/stages of the SOP. The student demonstrates **good** use of the LIMS that is **partially** accurate and complete with information, processing sample details and generating unique labels with **some** accuracy. 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 2 (5–8 marks)	The student demonstrates **reasonable** knowledge, understanding and skills when preparing the reagents and materials, following a few steps/stages of the SOP. The student demonstrates **reasonable** use of the LIMS that is in places accurate and complete with information, processing sample details and generating unique labels with **reasonable** accuracy. 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** knowledge, understanding and skills when preparing the reagents and materials, inconsistently following the steps/stages of the SOP. The student demonstrates **basic** use of the LIMS that is in places accurate and completed, processing sample details and generating unique labels with **limited** accuracy. The student demonstrates **basic** communication skills, with a **limited** use of technical language when providing information and reporting to the biomedical scientist, and with only **basic** 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

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

- enter sample details including hospital number, date of birth, full name and test requested onto LIMS
- generate a unique label for each sample
- recording where each reference sample and patient sample is loaded into the 96 well plate to allow for analysis, which matches the allocation of wells in the 96 well plate

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

- communicate completion of samples with BMS

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

	attention to detail	hygiene standards	knowledge of safe practice
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,** including **good** understanding of the correct use of correct clinical waste bins. The student's adherence to local laboratory regulations when storing samples is **good** 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 on the 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 **basic** monitoring and maintenance of their working environment, demonstrating **basic** 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

Owner: Head of Assessment Design