



T Level Technical Qualification in Healthcare Science

Occupational specialism assessment (OSA)

Assisting with Healthcare Science

Assignment 3

Assignment brief

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Contents

Task 1: microscopy – Giemsa stain	3
Task 2: specimen analysis – blood	4
Change History Record.....	5

Task 1: microscopy – Giemsa stain

Brief

Location: haematology laboratory

You are supporting a biomedical scientist (BMS) with analysing a patient's whole blood sample which has arrived from one of the wards. You need to analyse the percentage, volume and number of blood cells from the sample and relay this information to the biomedical scientist.

Task

- 1(a) complete preparation to carry out a Giemsa stain method on blood (including the work area and self)
- 1(b) produce microscope slides with a blood film of the sample blood
- 1(c) complete a stain method on the blood slides using Giemsa stain and accurately record the percentage of cell types within the sample. A control slide of whole blood has been provided to you for you to refer to
- 1(d) dispose of materials and samples appropriately, and clean equipment and work area

(40 marks)

Student instructions

Following the quality control (QC) confirmation of your Giemsa stain using the microscope as part of task 1(c), you must notify the biomedical scientist and explain how you have completed the control Giemsa stain prior to commencing task 1(d).

Conditions of the assessment

- task 1 must be completed in supervised conditions
- you will only have access to materials permitted by your tutor and available in the designated assessment area
- you will have a maximum of 1 hour to complete this task

Task 2: specimen analysis – blood

Brief

Location: haematology laboratory

You are given a patient's blood sample. The biomedical scientist asks you to analyse the patient's blood by performing a cell count on **only** the white blood cells (WBCs) in this sample.

Task

The biomedical scientist has asked you to confirm the number of white blood cells in the sample.

2(a) prepare the work area and self for carrying out cell counting of the WBCs

2(b) separate the blood sample into its components using centrifugation and aliquot a chosen volume of WBCs from the sample

2(c) using a haemocytometer, count the WBCs within a selected volume of blood:

- follow the standard operating procedure (SOP)
- confirm the specimen is ready for analysis
- discuss 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)

Student instructions

You must log the samples and results into the laboratory information management system (LIMS).

Conditions of the assessment

- task 2 must be completed in supervised conditions
- you will only have access to materials permitted by your tutor and available in the designated assessment area
- you will have a maximum of 1 hour 30 minutes to complete this task

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Owner: Head of Assessment Design

Change History Record

Version	Description of change	Approval	Date of issue
v1.0	Additional sample material		01 September 2023
v1.1	Sample added as a watermark	November 2023	21 November 2023