



AUSTRALIAN INSTITUTE OF MEDICAL AND CLINICAL SCIENTISTS

AIMS Special Professional Examination

Medical Laboratory Scientist ANZSCO 234611

EXAMINATION PACK

This pack contains:

- **Guidelines for the AIMS Special Professional Examination**
- **Study Guide for the AIMS Special Professional Examination**
- **AIMS Online Remote Proctored Examination Rules**
- **Sample Examination Questions**



AUSTRALIAN INSTITUTE OF MEDICAL AND CLINICAL SCIENTISTS

Guidelines for the AIMS Special Professional Examination

APPLICANTS ARE STRONGLY ADVISED TO READ THESE GUIDELINES CAREFULLY BEFORE COMPLETING THE APPLICATION FORM

The AIMS Special Professional Examination – Medical Laboratory Scientist ANZSCO 234611

The AIMS Special Professional Examination is a written examination of two (2) hours (plus 10 minutes reading time) consisting of 1-2 essay questions (30-40 minutes) and 15-20 short answer questions. The examination is conducted twice a year in March and September using online remote proctored software. Remote proctoring involves sitting the exam under live supervision using your computer's webcam and your mobile phone in a suitable location with reliable internet connectivity.

Questions in this paper focus on pathology laboratory operations and include topics on laboratory accreditation, quality control, quality assurance and quality systems, pre-analytic factors impacting laboratory results, regulations and requirements governing laboratory operations e.g., health and safety, safe transport of samples, waste disposal, ethics, integrity of patient information etc. The pass mark for this paper is 50%.

The examination is set at the level expected of a professional Medical Laboratory Scientist with at least two (2) years full-time (or part-time equivalent) post graduate professional experience. Completed examinations are not released under any circumstances. All results are subject to a moderation process before being released to the candidate.

Applicants who are successful in the examination will be classified as suitable for the occupation of **Medical Laboratory Scientist ANZSCO 234611**.

Please note: if you have not completed **Stage 1** of your assessment of professional skills and qualifications then you are not able to apply for the Special Professional examination. For further information, please contact the AIMS National Office.

AIMS Special Professional Examination Application and Payment Deadlines

You must apply in writing to sit the AIMS Special Professional Examination using the application form provided with your *Stage 1 Skills Assessment Results Letter*.

Closing dates to receive the examination application form are:

- **1 December** for the **March** Examination
- **10 July** for the **September** Examination.

Emailed applications to sit the examination **must** be received no later than 4pm on the specified date.

Following the closing date for applications, you will be registered for the examination and sent a link for payment.

Payment due dates for the examinations are:

- **31 January** for the **March** Examination
- **8 August** for the **September** Examination.

You will receive notification of your: examination date; allocated starting time; instructions regarding your practice test, trial exam, official exam; and detailed instructions on how to install the WebLock secured web browser software. The notification will be sent by the AIMS third party examination service provider to the email address provided on your application form. The notification email will be sent to you by:

- The second week of **February** (for **March** examinations)
- The second week of **August** (for **September** examinations).

If you do not receive your notification by **15 February** (March examination) or **15 August** (September examination), please contact us immediately at exam@aims.org.au.

English Language Requirement

Applicants do not need to supply an English Proficiency Test Report for a second time provided the application for the AIMS Special Professional Examination is received within **three (3)** years of the date of the applicant's *Stage 1 Skills Assessment Results Letter*.

Fees

All Fees are in Australian Dollars and are non-refundable. Refer to the [AIMS website for current fees](#).

Photographs and Candidate Identification

Please submit one (1) **colour** photograph with your application form. The photograph must be of good quality, taken within the last six (6) months and taken against a light-coloured plain background. Self-taken photographs are not acceptable.

The remote proctor will ask you to show your ID prior to the commencement of your online trial and official examination. Acceptable IDs for candidates sitting examinations will be as follows:

- A. Candidates sitting in Australia or New Zealand will need to provide one of the following:
- Passport or
 - Australian/NZ driver's licence
- B. Candidates sitting overseas will need to provide one of the following:
- Passport or
 - Government issued overseas driver's licence (with photo)

Enrolment deferral

A request to defer enrolment to the next examination session must be sent in writing to exam@aims.org.au **prior to the payment deadline for the current examination session**. For example, an applicant enrolled in the March examination wishing to defer to the September examination must submit a deferral request prior to the March payment deadline (31 January). Requests received after the payment deadline will not be accepted.

Once a deferral request has been received, an applicant will be asked to submit a new application form (and recent photograph) for the next examination session. This application must be received **prior to the expiration of the three (3) year validity period** stated on the applicant's *Stage 1 Skills Assessment Results Letter*. The examination **deferral fee** can be found on the [AIMS website](#). Examination fees will not be refunded.

Results

It will take up to ten (10) weeks to receive your Special Professional examination results. Results will be given as either a PASS or FAIL. Exact marks will not be given.

Lodging Your Examination Application

Email your completed examination application form and photograph to exam@aims.org.au.

Checklist

- Complete application form with the declaration signed in ink
- Complete payment information
- Scan the application form in **colour** to PDF file format.
- Email the scanned application form and photograph.

Review

Candidates have 21 days from the date of the results letter to request a review of their examination paper. Requests must be sent in writing to exam@aims.org.au. Refer to the [AIMS website for current fees](#).

A review of marks is undertaken by representatives of the Examination Council.

Further Information

Telephone	+61 7 3876 2988
Enquiries / Applications	exam@aims.org.au
Website	www.aims.org.au



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Study Guide

AIMS Special Professional Examination – Medical Laboratory Scientist ANZSCO 234611

Major Areas of Knowledge

The major areas of knowledge expected of candidates are as follows:

Laboratory Safety

- Safe handling and disposal of biological specimens
- Safe handling, storage and disposal of hazardous chemicals
- Sterilisation and disinfection procedures
- Handling of infectious specimens
- Transportation of biological specimens including IATA regulations on the transport of infectious substances

Principles of Quality Control, Quality Assurance and Quality Systems

- Basic charting and rules for rejection of results.
- Simple statistical evaluation. Reference ranges methodology – parametric and non-parametric
- Test system sensitivity, specificity, and predictive value
- The role of internal quality control and external quality assurance
- Uncertainty of measurement
- Pre-analytical factors impacting the quality and reliability of laboratory results
- Six Sigma and Lean thinking

Laboratory Accreditation

- Principles of ISO15189 accreditation
- Role of internal audits
- What constitutes non-conformance
- Root cause analysis
- NPAAC guidelines and NATA accreditation

Ethics

- Confidentiality and privacy of information
- Professional ethics and their application in medical pathology laboratory practice
- Patient safety

Information Technology and Medical Laboratory practice

- Laboratory Information Systems and their role in laboratory operation

Recommended Reading List

The most recent edition of texts is recommended, however, recent earlier editions of the texts below from within the last 10 years may be suitable.

- Harmening DM (2020) *Laboratory Management-Principles and Processes*, 4th edn, D.H. Publishing & Consulting Inc.
- McPherson RA and Pincus MR (2021) *Henry's Clinical Diagnosis and Management by Laboratory Methods*, 24th edn, Elsevier
- Westgard JO (2016) *Basic QC Practices – Training in Statistical Quality Control for Medical Laboratories*, 4th edn, Maddison Westgard QC Inc.
- World Health Organisation - *Laboratory Quality Management System Handbook* (2011), Version 1.1. Available from www.who.int

Useful Websites

Please note: All links were current at the time this document was made available on our website.

Pathology Tests Explained	https://pathologytestsexplained.org.au/	Produced by the AACB in collaboration with AACC and RCPA. This site offers up-to-date information about laboratory tests and how they are used.
RCPA	https://www.rcpa.edu.au/Library	
AIMS	www.aims.org.au	
NATA	https://www.nata.com.au/	Laboratory policy and requirements.
NPAAC	http://www.health.gov.au/internet/main/publishing.nsf/Content/health-npaac-publication.htm	NPAAC guidelines regulation.
Australian Commission on Safety and Quality in Health Care	https://www.safetyandquality.gov.au/our-work/accreditation/pathology-accreditation-standards	Australian standards applicable to accredited pathology services
Australian Institute of Health and Welfare	https://www.aihw.gov.au/reports/australias-health/health-system-overview	On overview of the Australian Health Care system
AACB	https://www.aacb.asn.au/	Member access required for full access. Open access to some very useful material
International Standards Organisation (ISO)	https://www.iso.org/standard/56115.html	ISO 15189:2012 Medical laboratories – Requirements for quality and competence
AACC	https://www.aacc.org/	Member access required for full access. Open access to some very useful material
Pathology Tests Explained – Reference Intervals	https://pathologytestsexplained.org.au/understanding/overview-of-reference-intervals	Candidates should be familiar with the role and purpose of reference intervals, how they are determined and changes that can occur due to age and gender etc.
Associate for Molecular Pathology	https://www.amp.org/	Useful site providing information on recent developments in molecular diagnostics.



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Online Remote Proctored Examination Rules

1. The candidate will be monitored in real time by an online proctor, employed by the third party examination service provider, to detect any evidence of academic misconduct.
2. The candidate must complete one (1) practice test (at any time of their choosing) before they sit a trial examination.
 - The intent of the practice test is to give the candidate the opportunity to verify they have successfully installed the WebLock secured browser and to become familiar with the online examination interface.
3. The candidate must complete one (1) trial examination within two (2) weeks prior to sitting for the official examination.
 - The intent of the trial examination is to take the candidate through the process of doing the examination online with the supervision of a remote proctor.
 - Failure to complete the trial examination may disqualify the candidate from sitting the official examination.
4. The questions in the practice test and the trial examination are a small selection from the same example questions that can be found in this Examination Pack and will not be scored and will not be used in the candidate's assessment results.
5. The candidate must do their practice test, trial examination and the official examination on the same computer that they have installed the WebLock secured browser.
6. Candidates are required to type their answers in English.
7. Whilst the online examination interface continuously captures the candidate's answers as the candidate progresses through the examination, the candidate must submit their examination before the end of the two (2) hour examination period.
8. During the examination period, the candidate will be able to review and modify their answers before they submit their examination.
9. During the examination, the examination interface will indicate the time remaining.
10. The candidate **MUST** show a photo ID (passport or driver's license) to the remote proctor before commencing the trial and official examinations.
11. No headphones can be used during the examination.
12. The candidate must **not** have in their room any books, dictionaries, notes or other documents.
13. The candidate must **not** have in their room devices except for those authorised by the remote proctor.
14. No person other than the candidate is permitted in the room at any time during the examination.
15. No bathroom or rest breaks are allowed during the examination unless a candidate has applied for approved special consideration due to a disability or medical condition.
16. A blank sheet of paper and a pen is allowed on the candidate's desk for workings only.
17. The candidate must remove any smart watches, jewellery, scarfs (not including religious headwear), caps and hats.
18. A calculator will **not** be required for the examination. The examination may include simple arithmetic calculations.
19. Academic misconduct may include any of the following activities:
 - Copying material from other sources and presenting it as their own work.
 - Impersonating a registered candidate.
 - Collaborating with another person when completing the online examination as it must be the candidates own work.

- Unauthorised access to examination questions or related material before or after the examination.
 - A failure to follow the rules of the examination that gives the candidate an advantage.
 - **Inappropriate** use of a mobile phone, other electronic devices including smart watches, electronic calculators, iPads, tablets.
20. Examination answers should reflect the candidate's own work.
 21. Plagiarism detection software will be used to monitor candidate examination papers submitted for review.
 22. No candidate shall in any way give assistance to, or receive assistance from, any other person before, during or after the examination.
 23. The candidate will be recorded via video if the remote proctor believes there is an incident of misconduct. If the incident continues after a warning, the candidate's examination will be cancelled and the incident reported to AIMS.
 24. Misconduct in examinations shall be reported in writing by the remote proctor to AIMS, and AIMS will conduct an investigation.
 25. A candidate who is found to be guilty of misconduct in an examination may have their examination paper declared null and void.
 26. Candidates will be expected to start their examination at the time allocated by the examination service provider.
 27. If a candidate believes there was an error in a question, then they should report it to AIMS within five (5) business days after they have completed their online examination.
 28. Candidates who have a disability and / or medical condition and who may require special examination requirements can apply in writing to AIMS for an assessment. A certificate from the candidate's medical doctor must be submitted with the application for special examination requirements. The medical doctor's certificate must justify the special examination requirement and describe the special examination needed. Special examination requirements may include:
 - A candidate is given additional writing time depending on the level of their disability. The additional time will be automatically added to their exam duration by the exam service provider.
 - A candidate is given approved rest breaks. The additional time for the rest breaks will be added to their exam duration by the exam service provider.
 29. Candidates must submit their written application for special examination requirements no later than three (3) weeks prior to the date of the examination. The application may be submitted as an attachment to an email.
 30. Candidates who have been significantly affected by ill health or other serious circumstances just prior to taking the exam may be eligible to apply for special consideration. Special consideration is a post-examination adjustment that compensates candidates who were suffering from a temporary illness or condition or who were otherwise disadvantaged at the time of the examination.
 31. An application for special consideration will only be considered if on the day of or just prior to taking the examination:
 - The candidate was adversely affected to a substantial degree by illness or other cause, and / or
 - The circumstances were beyond the candidate's control.
 32. Examples of ill health: the candidate is hospitalised, or the candidate has a life threatening disease.
 33. Example of a serious circumstance: there has been a death in the candidate's **immediate** family.
 34. Missing examinations: Candidates are strongly advised to attend their designated examination unless the candidate is physically incapable of doing so. Missing an examination does not automatically entitle the candidate to a *special consideration*.
 35. Candidates must submit their written application for special consideration no later than three (3) working days after the date of the examination. The application may be submitted as an attachment to an email.
 36. The candidate has five (5) working days from when they lodge their application for special consideration in which to submit supporting documents from an appropriate professional. Applications lodged without supporting documentation will not be considered.
 37. The supporting documentation for *special consideration* due to ill health must be a certificate written by the candidate's medical doctor. The certificate must state that the candidate was physically incapable of completing the examination on the designated day of the examination.

38. The supporting documentation for *special consideration* due to serious circumstances includes the following:
- letter from a social worker, lawyer, or psychologist
 - death notice or certificate and evidence of relationship
 - police report
 - statutory declarations from relevant people
 - notification from:
 - defence services
 - Juries Commissioner's Office
 - emergency service organisations such as the Country Fire Authority.
39. Candidates must ensure that they are familiar with [AIMS Code of Professional Conduct](#).
40. Academic misconduct in examinations is a prohibited activity and would contravene the AIMS Code of Professional Conduct.



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AIMS Special Professional Examination - Sample Questions

PLEASE NOTE THESE QUESTIONS ARE FOR GUIDANCE ONLY

NO FURTHER SAMPLE QUESTIONS WILL BE PROVIDED BY AIMS

Essay questions

1. What is your understanding of competency and what are key elements of a competency assessment?
2. Describe the important elements of an effective quality management system. How do these elements contribute to the Operations of a diagnostic laboratory?

Short answer and questions

1. List the three analytical components of the laboratory testing process described by ISO standards?
2. List three of the laboratory standards available for Australian pathology laboratories to reference?
3. List some of the hazards in a pathology laboratory?
4. What are some of the safety practises put in place to minimise hazards in the workplace?
5. Discuss the communication of high risk pathology results?
6. What are the categories of medical pathology laboratories described by NPAAC in relation to clinical governance and the requirements for supervision?