

Diploma in Anatomical Pathology Technology

2006

Description:

The Anatomical Pathology Technician plays a vital role in assisting the pathologist. They may also take charge of the mortuary and the post-mortem room and, may also be involved in teaching hygiene and safety to assistants in the mortuary.

The Diploma is a qualification designed for experienced Anatomical Pathology Technicians who usually work in a mortuary and, who have attained the RSPH Certificate in Anatomical Pathology Technology.

The aim of this examination is to assess the competence of the APT to give scientific and practical assistance to the pathologist in the post-mortem room and to be proficient in all aspects of hygiene and safety. The Diploma acknowledges the APT's ability to take charge of a mortuary and to instruct assistants in safe practices.

Summary of Outcomes:

To achieve this qualification a candidate must:

- Demonstrate a comprehensive knowledge of human anatomy and physiology.
- Apply appropriate techniques in post-mortem examinations.
- Identify potential hazards to health and take measures to minimise or eliminate these risks in the mortuary.
- Demonstrate knowledge of the laws and codes of practice relating to the mortuary and implement legal requirements in relation to the dead.
- Demonstrate appropriate administrative procedures and deal correctly with visitors to the post-mortem room.

Each of these aims is expanded into objectives in the content section below. Please note that Elements indicated for Practical Assessment may also be assessed through the written or oral examinations.

Content:

To achieve this qualification a candidate must:

1. **Have a comprehensive knowledge of Human Anatomy and Physiology, by being able to:**
 - Use and understand relevant medical terminology in the:
 - i. Musculo-skeletal system: identify and name the main parts of the skeleton. Describe the structure and types of joints and the functions of bones, joints, ligaments, muscles and tendons.
 - ii. Central Nervous system: Identify, name and describe the parts and understand the major functions of the central nervous system including the brain, spinal cord, meninges and CSF. Describe the function of the autonomic nervous system.
 - iii. Cardio-vascular system: Identify, name and describe the heart chambers, valves and coverings and the main visceral arteries and veins. Describe and explain the functions of the circulatory system.
 - iv. Respiratory system: Identify, name and describe the main parts and explain the functions of the respiratory tract and muscles of respiration.
 - v. Alimentary system: Identify, name and describe the main parts and understand the functions of the gastrointestinal tract including salivary glands, liver, peritoneum and exocrine pancreas.
 - vi. Urinary system: Identify, name and describe the main parts and explain the functions of the urinary tract.
 - vii. Genital system: Identify, name and describe the main parts and the functions of the male genital tract and the female genital tract.
 - viii. Endocrine system: Identify, name and describe the main parts and explain the functions of the pituitary, thyroid, parathyroids, adrenal glands and endocrine pancreas.
 - ix. Immune system: Identify, name and describe the parts and explain the main functions of the spleen and lymphoid tissues.
 - x. Special senses: Identify, name and explain the main functions of the eye and ear.

2. Have a comprehensive knowledge and understanding of the application of appropriate techniques in post-mortem examinations, by being able to:

- Prepare a body for post-mortem examination according to instructions from the pathologist. **Practical Assessment**
- Open the thoracic and abdominal cavities and dissect free the floor of the mouth and neck structures. **Practical Assessment**
- Remove the thoracic and abdominal and pelvic organs. **Practical Assessment**
- Open the skull and spinal canal and remove the brain, spinal cord and pituitary gland. Expose the middle ear and strip the dura mater. **Practical Assessment**
- Expose the sternal, femoral and vertebral marrow. **Practical Assessment**
- Dissect the femoral and calf veins. **Practical Assessment**
- Reconstruct the head, spine, thorax, abdomen and limbs after a post-mortem examination. **Practical Assessment**
- State the measurements and weights to be recorded in adult and perinatal autopsies.
- Identify the containers required for the collection of infective and other materials for diagnostic purposes. Demonstrate correct collection procedures. **Practical Assessment**
- Explain the ways in which a special forensic autopsy differs from a coroner's (Procurator Fiscal) autopsy and from a hospital autopsy. State the containers necessary for toxicological diagnosis.
- State the principles of tissue fixation and the various fluids used in preserving and storing tissues in this way
- Carry out additional specialist techniques (e.g. photographs and X-rays) as instructed by the pathologist.
- Demonstrate how to prepare specimens for photography, mounting as museum specimens, teaching and demonstrations.

3. Have a comprehensive knowledge and understanding of how to identify potential hazards to health and measures to minimise or eliminate these risks in the mortuary, by being able to

- Describe the nature of infective agents, including bacteria, viruses, fungi, protozoa and parasites and how they spread and gain access to the body.
- State the purposes and principles of refrigeration.
- State the principles of disinfection by autoclaving and with chemicals. List the main disinfectants necessary in the post-mortem room, their uses and concentrations in the sterilisation of instruments and other equipment.
- List the items of protective clothing needed for a post-mortem examination, including the special requirements in high-risk cases.
- Explain how good personal hygiene contributes to the prevention of infection and apply the main principles of personal hygiene.
- Describe the main infective diseases which can be contracted in the post-mortem room and of the specific precautions taken against them, including immunisation, precautions with potentially infective bodies, special clothing and special disinfection procedures.
- State how irradiation can affect health and the procedure to follow when bodies containing radioactive material reach the mortuary. Explain the precautions necessary when post-mortem examinations have to be performed in radioactive bodies.
- Carry out the practical procedures for the safe disposal of all types of waste including infective, toxic and radioactive. **Practical Assessment**
- Demonstrate ability to perform First Aid, including care of wounds and artificial respiration. **Practical Assessment**
- Describe the Health and Safety Acts and the COSHH Regulations as they apply to the mortuary, including the procedure in cases of spillage of harmful fluids.

4. **Have a comprehensive knowledge and understanding of the laws and codes of practice relating to the mortuary and implementing legal requirements in relation to the dead, by being able to:**
- State the requirements of the Code of Practice for safety in the mortuary.
 - State the legal requirements and written authority necessary for a hospital and a Coroner/Procurator Fiscal post-mortem. Know the types of death about which a Coroner/Procurator Fiscal should be informed.
 - State the Laws in respect of death certification.
 - State the legal requirements and documents necessary for cremation and explain the necessity for removal of cardiac pacemakers and radioactive implants.
 - State the legal requirements, documents and procedures to follow for organs to be removed from a body for transplantation.
 - State the procedure for reporting occupational illness and injury.
 - Explain the importance of medical confidentiality.
5. **Have a comprehensive knowledge and understanding of the appropriate administrative procedures and how to deal correctly with visitors to the post-mortem room, by being able to**
- Describe the requirements and procedures for the identification of bodies arriving in the mortuary and for releasing bodies to funeral directors.
 - Carry out the correct procedures for registration of bodies whilst in the mortuary, including the mortuary register, autopsy register and register of property from the deceased. **Practical Assessment**
 - Describe the arrangements for safeguarding of valuables and other property of the deceased. **Practical Assessment**
 - Describe the correct procedure for checking stock and equipment and also the hygienic precautions necessary for the disinfection, care, storage and maintenance of instruments.
 - Make provisions for all visitors to the post-mortem room and ensure that they wear the correct protective clothing and follow correct procedures
 - Deal sympathetically with, and offer advice to, relatives and other bereaved persons who may visit the mortuary for identification or viewing.
 - Describe the situations in which access should be facilitated for ministers of religion and the procedures to be followed.
 - Describe the requirements of ethnic minorities with regard to death.
 - Describe the role of the Senior APT in mortuary management and training.

Assessment:

The assessment for the award of the Diploma is made up of three parts: A Practical Assessment Record Book (PARB), a written examination and an oral test, all of which test knowledge and understanding of the whole syllabus.

- The Practical Assessment Record Book prescribes the practical tasks that must be undertaken by the candidate and authorised by the Consultant Pathologist, providing a continual assessment of practical performance of the candidate.
- These tasks must be completed in order for the candidate to be eligible to take the written and oral examinations.
- The written examination consists of one paper of 2 hours' duration and comprises three sections that test knowledge and understanding of the whole syllabus.

Section A: Two questions to be attempted from a choice of three.

Section B: One question to be attempted from a choice of two.

Section C: One question to be attempted from a choice of two.

The maximum number of marks attainable in the written examination is 100 marks.

- The Oral Examination lasts about 15 minutes and assesses the candidate's theoretical and practical knowledge. It is held on the same day as the written examination. The oral examiner will be a RSPH approved consultant pathologist.

The maximum number of marks attainable in the oral examination is 30 marks.

Candidates must gain at least half marks in each of the written and oral examinations, but must achieve an overall mark of 60% in order to be awarded a pass in the Diploma in Anatomical Pathology.

Entry to Examination

1.

All Diploma Examination candidates must:

- Already hold the Certificate in Anatomical Pathology Technology.
- Have successfully completed the number of specified practical tasks as outlined in the PARB, which are recorded and signed by their supervisor. The Practical Assessment Record Book must be returned to the RSPH with the candidate's examination entry form. An APT will normally require one year's further experience in order to complete these practical tasks. Candidates who do not return the completed PARB with their examination entry form will not be eligible to sit the written or oral examinations.

Note: it is strongly recommended that Diploma candidates attend an approved course of study before sitting the examination – please see Approved Courses.

Application forms will be supplied to centres and all eligible candidates in January, prior to the April examination. Each individual candidate must submit a completed **Examination Entry Form** (duly authorised by a pathologist) by 1st March, together with a completed **Practical Assessment Record Book** and cheque **in payment** of the examination fee.

Date of Examination

The examination is held annually in April, and the written paper and oral must be taken on the same day, on the date set by the RSPH.

A Calendar of Examination Dates is sent annually to all centres in *August* of each year. Additionally, full details of the DAPT examination can be found on the RSPH website www.rsph.org.uk or by contacting the RSPH Qualifications Department.

Examination Fees

Centres are routinely informed in *August* each year about examination fees for the following year. Additionally, full details of the DAPT examination can be found on the RSPH website www.rsph.org.uk or by contacting the RSPH Qualifications Department..

Approved Courses

Organisers of courses should notify the RSPH by 1st August in each year that a course is planned for preparation for the examination in April of the next year. A programme of training should be submitted and approved at that time. All courses must include systematic instruction by lectures and demonstrations to cover all parts of the syllabus. Courses are expected to allow for at least 40 hours of instruction. Lecturers may include hospital consultants, pathologists and others who are qualified in specific areas of the syllabus. Experienced Anatomical Pathology Technicians who already hold the RSPH Diploma may also give instruction on preparing bodies for post mortem and on reconstruction of bodies and on mortuary administration. They may also help with the demonstration of specialised techniques such as the removal of the spinal cord and parts of the skeleton, and in preparing specimens for demonstrations and photography.

Examination Results and Diplomas

Examination results are graded as follows:

Honours - 104 to 130 marks

Credit - 91 to 103 marks

Pass - 78 to 90 marks

Fail - 0 to 77 marks

The RSPH will forward certificates for successful candidates directly to candidates within nine weeks of the examination taking place. Unsuccessful candidates will receive written confirmation and invited to re-sit the examination the following year

Any enquiries about this qualification should be made to:

The Qualifications Department,
Royal Society for Public Health
3rd Floor
Market Towers
1 Nine Elms Lane
SW8 5NQ