

Appendix B: RAC (EU) Detailed Exam Content Outline

The RAC (EU) examination is organized into three major domains, with associated tasks and responsibilities typically undertaken by a regulatory professional. The approximate distribution of types of questions for each domain is shown in the following outline. Questions on the exam will address the tasks and activities presented in this outline.

Domain I: Strategic Planning

Approximately 11 recall questions, 10 application questions, and 10 analysis questions for a 100-question examination (percent of items on exam: 31%)

- A. Regulatory Framework
 - i. Determine the regulatory classification status in European Union markets where the product may be launched.
 - ii. Monitor and assess the regulatory environment in European Union markets where the product may be launched (including additional national requirements such as legal status) and initiate changes within the company.
 - iii. Investigate and communicate when it is necessary to request technical and scientific guidance from relevant organisations.
 - iv. Evaluate regulatory requirements for markets outside of the European Union that recognize EU requirements.
 - v. Provide input to trade associations and standards organizations to influence the European regulatory environment (legislation, guidance documents, and standards).
 - vi. Perform Competitor Surveillance (e.g., EPAR, SmPCs, claims, indications) to evaluate potential changes, issues, and strategies.
 - vii. Contribute to in-house training programmes for company personnel to ensure regulatory and quality compliance.
- B. Regulatory Pathways and Options
 - i. Advise management on requirements and options for regulatory submissions, approvals, and conformity assessments (e.g., local, national, international options).
 - ii. Advise management on timelines, risks and financial implications of the proposed regulatory strategy.
 - iii. Investigate and communicate the availability of incentives (e.g., financial, data/market exclusivity) to support product development.
 - iv. Develop effective regulatory submission strategies for timely product approval.
 - v. Advise colleagues on compliance with relevant regulatory legislation, guidelines, standards, etc.
- C. Health Economics
 - i. Provide input to and advise senior management regarding Comparative Effectiveness/Health Technology Assessment.
 - ii. Advise senior management regarding pricing and reimbursement issues.
- D. Interaction with Other Companies
 - i. Advise senior management during product or company acquisitions and collaborations.
 - ii. Conduct regulatory due diligence during acquisitions and collaborations.
 - iii. In- and out-licensing of products from/to a third party.
- E. Crisis Management
 - i. Advise management regarding the regulatory impact of a crisis event (e.g., plant shut down) and propose a resolution strategy.
 - ii. Participate in the development and functioning of the crisis management programme.

Domain II: Design and Development

Approximately 12 recall questions, 12 application questions, and 12 analysis questions for a 100-question examination (percent of items on exam: 36%)

- A. Manufacturing/Quality (CMC)
 - i. Define and communicate regulatory requirements for the scope of manufacturing authorisations/quality system certifications (e.g., clinical trial supplies, operations allowed, pharmaceutical forms, design, manufacture, device types).
 - ii. Review completeness of production documentation to support CTA/MAA submissions/manufacturing transfer.
 - iii. Ensure that available stability data supports intended shelf-life of product.
- B. Nonclinical and Clinical Development
 - i. Advise sponsor of regulatory requirements for clinical trials/investigations.
 - ii. Determine adequacy of nonclinical data and risk analysis to support approval to conduct clinical trials/investigations.
 - iii. Identify national/local requirements and prepare clinical trials/investigations submissions to CA/EC.
 - iv. Prepare or review study information such as IMPD/technical file/design dossier, label, clinical investigation plan/protocol, case report form, investigators brochure, patient information letter, and informed consent to comply with local, regional, national, European, and international regulatory requirements.
 - v. Interact with and coordinate the use of CROs, subcontractors, test facilities, and consultants.
 - vi. Respond to questions/comments from CA/EC.
 - vii. Ensure regulatory compliance of manufacture and release of investigational products for clinical use.
 - viii. Ensure that reporting procedures are in place to report adverse events that occur during clinical trials/investigations to CA/EC.
 - ix. Review clinical data from literature and other sources.
 - x. Report trial/investigation results to CA/EC.
 - xi. Maintain authorisation for on-going clinical trials/investigations (e.g., amendments, annual reports, updates).
 - xii. Evaluate need for and contribute to the development of Paediatric Investigation Plans/waivers/deferrals.
- C. Preregistration/CE Marking Interfacing
 - i. Evaluate need for and coordinate Protocol Assistance/Scientific Advice Meetings with CAs.
 - ii. Liaise with project team to develop project plans including submission timelines, deliverables, etc.
 - iii. Liaise with marketing/project team to develop target product profile and determine the claims that can and cannot be made based on available data.
 - iv. Participate in audits/inspections by NBs/CAs and contribute to responses to audit findings as required.
 - v. Evaluate and communicate relevant legislation and guidelines (e.g., EMA, scientific, harmonized standards, and essential requirements).
- D. Registration/CE Marking
 - i. Ensure adequate documentation to support MAA/Technical File/Design dossier.
 - a. Proof of concept/animal model
 - i. Nonclinical safety/biocompatibility
 - b. Clinical safety and performance/efficacy
 - c. Product quality/design verification and validation
 - d. Administrative data, forms, manufacturer authorisations/certifications, declarations and essential requirements checklists
 - e. Labeling/Product Information (including readability testing)
 - f. Risk Management Plan/File
 - g. Vigilance system
 - h. Post-market surveillance plan
 - i. Environmental risk assessment
 - j. Compliance with other applicable directives (e.g., WEEE, ROHS, machinery, battery)
 - ii. Prepare MAA/Design Dossier/Technical File.
 - iii. Submit MAA (incl. eCTD requirements)/Design Dossier to CA/NB.
 - iv. Monitor /track submission progress (procedural timelines).
 - v. Respond to questions/comments from CA/NB.
 - vi. Meet with CA/NB to negotiate during review process.
 - vii. Coordinate product information (i.e. label, carton, and leaflet/IFU) translations.
 - viii. Review approval documents/certificates.

Domain III: Postapproval

Approximately 11 recall questions, 11 application questions, and 11 analysis questions for a 100-question examination (percent of Items on exam: 33%)

- A. Advertising/Promoting/Labelling
 - i. Review and approve revised labelling and claims, public communications, press releases, advertising, and promotional items for regulatory compliance
 - ii. Provide regulatory input to commercial and marketing strategies.
 - iii. Review and evaluate advertising, labelling, and claims of competitors
 - iv. Provide regulatory input to tender applications (e.g., overview of licensing status, product quality, product shelf life, declaration of conformance)
 - v. Evaluate and communicate to management the implications of off-label use

- B. Postmarketing Surveillance and Vigilance
 - i. Evaluate reports of product failures and complaints
 - ii. Write field safety notices and report product failures and recalls /field safety corrective actions to CAs
 - iii. Maintain vigilance and ensure post-market surveillance activities are conducted.
 - iv. Ensure that Periodic Safety Update Reports (PSUR) are compiled and submitted to CAs according to regulatory timelines.
 - v. Ensure regulatory compliance of post-approval clinical studies
 - vi. Ensure implementation and monitor effectiveness of safety alerts, notifications, field safety corrective actions, and recalls.
 - vii. Consider use of information gained in the post-market phase for broadening product indications

- C. Supply Chain
 - i. Ensure compliance with regulatory requirements for supply, handling, distribution, import and export of materials.
 - ii. Review regulatory aspects of supplier and distributor contracts (e.g., complaints, traceability, changes, etc.)

- D. Product-specific Crisis Management
 - i. Advise management regarding the regulatory impact of a crisis event (e.g., batch failure)
 - ii. Advise management on regulatory implications of proposed crisis resolution strategies

- E. Postapproval Regulatory Compliance
 - i. Advise the Management Representative/Qualified Person regarding regulatory requirements.
 - ii. Ensure quality system SOPs meet regulatory requirements
 - iii. Assess whether new or revised legislation, guidelines, monographs and harmonized standards affect certain functions, activities, or products
 - iv. Initiate, monitor, document and submit changes where applicable to ensure compliance with new or revised legislation, guidelines, monographs, and harmonised standards
 - v. Review and monitor contractual obligations and agreements with NBs to ensure regulatory compliance
 - vi. Negotiate wording of audit findings