## FORMAT OF THE EXAMINATION

The format of the examinations shall include the following two parts:

***I. General Microbiology***

This part of the Examination shall deal with (i) nomenclature, classification, morphology, geographical distribution, biological characteristics (including cell and molecular biology), detection and identification of bacteria, fungi and viruses of animals and animal products, and (ii) pathogenesis, immunology, pathology, epizootiology, clinical presentation, diagnosis and control of bacterial, fungal and viral diseases of animals.

Format: Forty multiple choice questions (MCQ) + 2 essay questions (to be chosen by the candidate from a list of 4) + 4 short answer questions (to be selected by the candidate from a list of 6).

Duration: 3 hours

Proportion of the final mark: 40%.

***II. Applied Microbiology***

This part of the Examination consists of two sections, Sections A& B.

**Section A:** shall be used to evaluate the candidate’s clinical expertise in veterinary microbiology, and their communication skills. It shall be based on the preparation of four case reports dealing with different species of domesticated animals. The case reports must be organised as follows: clinical history, clinical presentation, differential diagnosis, diagnosis, control and outcome. Preparation of this material will rely on instructions available in this document and on the ECVM website. Other contributions such as a research project report, field trials (drugs/vaccines), evaluation of an infection control scheme, etc., may be acceptable in exceptional cases but prior agreement must be obtained from the Examination Committee.

Format: The full dossier (4 case reports) must be provided at least 3 months before the next scheduled examination. Candidates must prepare a presentation of all four case reports (using PowerPoint or similar software) before the examination. The particular case-report selected by the Examination Committee for oral presentation will be announced to the candidate during the examination.

Duration: approx. 30 minutes (15 minutes for the presentation and 15 minutes for questions).

Proportion of the final mark: 40% (of which 20% is for the orally presented report and discussion; and 20% for the four written case reports).

**Section B**: the Examination shall be used to evaluate the candidate’s ability to understand and use in an appropriate way different diagnostic techniques. Section B will consist of the following:

* + Diagnostic scenarios: Ten diagnostic scenarios (consisting of up to 200 words of text plus appropriate laboratory data) each with four associated MCQs based on the critical analysis of clinical, serological, isolation, molecular or biochemical data (a total of forty MCQs).
* Microbial identification: Fifteen cultures, microscopic preparations or pictures to be examined. Specimens to be identified will be accompanied by a brief history and relevant background details.

Duration: 3 hours.

Proportion of the final mark: 20%.

**Reading List**

**Certifying Examination Recommended Reading List**

**Main Study Textbooks (in alphabetical order)**

Clinical Veterinary Microbiology 2nd Edition (2013)

by Bryan Markey (Author), Finola Leonard (Author), Marie Archambault (Author), Ann Cullinane (Author), Dores Maguire (Author)

Mosby

ISBN-13: 978-0723432371

ISBN-10: 9780723432371

Veterinary Microbiology and Microbial Disease 2nd Edition (2011)

By ­P. J. Quinn (Author), B. K. Markey (Author), F. C. Leonard (Author), E. S. Fitzpatrick (Author), S. Fanning (Author)

Wiley-Blackwell

ISBN-13: 978-1405158237

ISBN-10: 1405158239

*Knowledge of basic and applied immunology, epidemiology, virology and pathology is assumed. Guidance for revision on these topics include the following textbooks:*

Veterinary Immunology 10th edition (2017)

By Ian Tizard.

Saunders

ISBN-13: 978-0323523493

Fenner's Veterinary Virology 5th Edition (2016)

by N. James Maclachlan BVSc MS PhD (Editor), Edward J Dubovi B.A. M.A. Ph.D. (Editor)

Academic Press

ISBN-13: 978-0128009468

ISBN-10: 0128009462

Veterinary Epidemiology, an Introduction. (2010).

By Dirk. U. Pfeiffer

Wiley-Blackwell.

ISBN-13: 978-1405176941

Pathologic Basis of Veterinary Disease Sixth edition (2016)

By James F. Zachary (Editor)

Mosby

ISBN-13: 978-0323357753

*The following textbooks are a useful source of information to increase the understanding and depth of knowledge of the candidate but would not be considered essential reading.*

Veterinary Microbiology 3rd Edition (2013)

by D. Scott McVey (Editor), Melissa Kennedy (Editor), M. M. Chengappa (Editor)

Wiley

ISBN-13: 978-0470959497

ISBN-10: 0470959495

Veterinary Microbiology: Bacterial and Fungal Agents of Animal Disease 1st Edition (2004)

by J. Glenn Songer  (Author), Karen W. Post (Author)

Saunders

ISBN-13: 978-0721687179

ISBN-10: 0721687172

Topley and Wilson’s Microbiology and Microbial Infections 10th edition (2007).

By W.W.C. Topley (Editor) and G. S. Wilson (Editor).

Wiley

Volumes: 1 & 2 Bacteriology, 3 & 4 Virology, 5 Medical Mycology, 7 Immunology

ISBN-13: 978-0470686386

Emerging and Epizootic Fungal Infections in Animals (2018)

By S. Seyedmousavi, G. S. de Hoog, J. Guillot, P. E. Verweij (Editors)

Springer International Publishing AG

ISBN-139783319720913

**Journals for ECVM Candidates (in order of priority)**

1. Veterinary Microbiology
2. Veterinary Research
3. Journal of Veterinary Diagnostic Investigation
4. Transboundary and Emerging Diseases
5. Veterinary Record
6. The Veterinary Journal
7. Preventive Veterinary Medicine

Exam questions may come from the literature published within the last **five** years. Questions may also come from older articles if they are considered significant and essential to the application of veterinary microbiology.

This list of journals is not intended to be a compulsory reading list but candidates should be encouraged to select publications within these journals that apply to: 1) investigation, diagnosis and control of infectious conditions; 2) Antimicrobial resistance; 3) Food microbiology; 4) One Health; 5) Emerging diseases.