

## Diploma in Equine Stud Medicine

Please view the general documents to obtain copies of:

### The stages of enrolment information.

- B1:** Guidance Notes for candidates on general requirements.
- B3:** General Guidance Notes on preparation for a Dissertation.
- E1:** Application form E.1 - for enrolment and initial approval of experience.
- H:** Role of Advisers to Certificate Candidates.

The following papers are attached:

- B2:** Specific requirements for the Diplomas.
- C:** Syllabus and Commentary for the Diplomas.
- D:** Reading lists – there are none for the Diplomas – please refer to Certificate Lists.
- E:** E.1(a), E.1(b), E.2
  - E.1(a)** - for specific details of practice/centre
  - E.1(b)** - for proposed title for Dissertation
  - E.2** - for final approval of experience and for permission to submit an entry to the examination
- F:** List of Techniques and Procedures - this should be countersigned by your Adviser/or Senior Colleague and submitted prior to entry to the examination and at the latest at the time for final approval of experience.
- G:** List of Advisers.

*A copy of the most recent Examination Question Paper is enclosed for your information.*

January 2010

The Royal College of Veterinary Surgeons  
Specialisation and Further Education

**THE DIPLOMA IN EQUINE ORTHOPAEDICS SURGERY**  
**THE DIPLOMA IN EQUINE SOFT TISSUE SURGERY**  
**THE DIPLOMA IN EQUINE INTERNAL MEDICINE**  
**THE DIPLOMA IN EQUINE STUD MEDICINE**

**SPECIFIC GUIDANCE NOTES FOR CANDIDATES**

[These notes must be read in conjunction with the B1 General Guidance Notes to Candidates]

**MEMBERSHIP OF THE ROYAL COLLEGE OF VETERINARY SURGEONS**

1. It is a requirement of the Equine Board that ALL candidates entering for these Diplomas are Members of the Royal College of Veterinary Surgeons (MsRCVS).

**SPECIFIC EXPERIENCE**

2. Candidates entering for the examination must have substantial involvement in the appropriate equine field.
3. Substantial involvement is defined as a veterinary surgeon gaining experience exclusively in an equine practice (or a mixed practice with a very large component of equine work) since graduation, who might be able to enter for the Diploma examination four-five years after graduation. However, it is considered that this would be exceptional, and that most candidates would take five-six years or longer from graduation. A substantial degree of participation, as defined by the Board in the subject concerned must include at least three calendar years of substantial intensive experience acceptable to the Board.
4. It is recommended that some association with Veterinary Schools or the Animal Health Trust through an appointed adviser is almost a necessity, especially for those whose circumstances e.g. a practice situation, do not normally allow interchange of information, or availability of literature etc., particularly in 'basic science' areas.
5. No period of experience can be offered to meet the requirements for more than one Certificate/Diploma and, preferably, applicants should be studying for one qualification only, at a time, at Diploma level.

6. Candidates may gain experience for a Diploma:

- (a) at an approved centre for their subject  
or
- (b) at an approved practice.

#### **Approved Centre Route**

7. Candidates following an approved training programme at an approved centre will not be permitted to enter for the examination until they have been Members of the College or held an approved veterinary qualification for **at least four years** and are required to offer experience in the subject over **at least four years**.
8. **Applications for approval of a Centre must be made directly by the Centre to the RCVS and not by the candidate. An application form can be obtained from the RCVS.**

#### **Approved Practice Route**

9. Candidates following the approved practice route will not be permitted to enter for the examination until they have been Members of the College or held an approved veterinary qualification for **at least five years** and are required to offer experience in the subject over either:
- (a) **at least five years including 200 days spent at an approved centre,**  
OR
  - (b) **at least six years** if gaining experience solely at an approved practice.
10. **There is no separate application form for approved practice other than the candidate applications forms enclosed within this Information Pack. Practices are approved for each individual candidate.**
11. The Board has discretion to increase the requirements for experience for any candidate above the minimum specified if it is considered to benefit the candidate.
12. Experience accepted for the Certificate will count towards the experience required for the Diploma, at the discretion of the Board, whether the candidate is at an approved centre or an approved practice.

## FINAL APPROVAL OF EXPERIENCE/ ADDITIONAL SUBMITTED WORK

### Certification of techniques and procedures

13. At the time of application for FINAL approval of experience, candidates will be issued with a list of certain techniques and procedures in which the candidate's competence must be certified by his adviser, or a senior colleague in the practice or centre where he is or has been employed. Those candidates who self-certify **MUST** have the list countersigned by their adviser. The certified list must be submitted to the RCVS by **1 November**.

### THE EXAMINATION

14. The examination consists of three Sections:
- (a) a Dissertation OR 5 Published Papers
  - (b) TWO x 3 hour written papers, and
  - (c) a clinical, oral and practical examination.

### SUBMITTED WORK FOR EXAMINATION

#### Dissertation OR Five published papers

15. A candidate's choice of subject for a dissertation must have been approved by the Board, and it is obviously of advantage to the candidate to have as much time as possible to write the dissertation, having obtained approval of the subject. **Alternatively**, the titles of a minimum of five published papers (accepted or submitted) for publication must also have been approved by the Board. It is strongly recommended that a candidate should seek advice from their advisers prior to application to the Board. For these reasons, application for approval of subject should be made not later than **1 November** in the year prior to that in which it is planned to take the examination. Candidates should note that papers must have been published or accepted for publication at the time of submission.

#### Dissertation

16. Application on Form E1B must be made for approval of the proposed subject of the dissertation by **1 November**. No exemption is permitted.
17. Candidates may **not** use all or part of the work prepared and submitted for another postgraduate qualification including Diploma of Fellowship, as all or part of their dissertation for an RCVS Diploma. However, publications in peer reviewed journals **arising from** any postgraduate degree, for example, a PhD or Masters thesis, could

be used towards a subsequent Diploma if publications of this type form part of the Diploma requirements and are appropriate to the discipline.

18. **Three copies** of the dissertation are required.

Candidates are also asked to submit an electronic version of their submitted work together with their hard copy. This will be retained at RCVS unless requested by the examiners for purposes such as checking the word count. The electronic version should be Microsoft Office 2000 or XP compatible and should be submitted on either CD or floppy disc/s. Please ensure that the disks are easily identifiable by placing them in an envelope with your name, and 'Electronic version of submitted work for 'Diploma in Equine Internal Medicine' marked clearly on the front.

### **Dissertation Word Count**

19. The dissertation should be of **not more than 10,000 words excluding the lists of references etc.** based on original material and data and incorporating personal observations, on a subject approved by the Board. The dissertation may be based on a retrospective study of a series of clinical cases.

20. A word count must be shown on the front cover of the Dissertation.

### **Five Published Papers**

21. Application on Form E1B must be made for approval of the proposed subject of the Published Papers by **1 November**. No exemption is permitted.

22. As an alternative to the Dissertation, a candidate may submit **FIVE papers published in refereed journals** which have not previously been submitted for another postgraduate qualification. These should consist of a **minimum of TWO Principal Author papers and THREE other papers in which the candidate has had a substantial input.**

23. **Three copies** of the published papers are required, and should be presented bound.

24. The five papers should have a common or linked theme with an 'Introductory Chapter' to be presented with the published papers in related areas reviewing the literature relating to the horse and the relationship between this and the published paper AND a 'Concluding Chapter' discussing the importance of the body of work presented.

25. The candidate may elect to include additional data related to but not included in the five papers.

26. Only papers published, or accepted for publication at the time of submission, in a refereed journal may be used. If a paper is submitted for examination that has not already been published, then it **MUST** be accompanied by a letter from the Editor of the refereed journal confirming final acceptance of the paper for publication. A paper that is accepted for publication subject to minor changes being made is NOT ACCEPTABLE for the examinations.
27. A review article is acceptable as ONE of the published papers providing at least ONE of the other published papers is original work. Short communications, such as brief case reports, are not acceptable. Reviews of a series of cases are acceptable.
28. If any multi-author papers are to be included, these must be accompanied by a statement from the co-authors that the senior author (the candidate) was responsible for the majority of the work. The following statement should be included at the front of each copy of the published papers.

*Published papers submitted in part fulfilment of the requirements for the RCVS Diploma in.....by (name of candidate).*

*Acknowledgements are due to: name.....for (description of assistance given).*

### **Grading Scheme**

29. The submitted work will be graded "Good Pass"; "Pass" or "Fail":
- **Good Pass** - (60% or over) - the work will be lodged in the RCVS Library as a suitable example for future candidates.
  - **Pass** (defined as 50%) – The work is adequate to enable the candidate to proceed to the remaining sections of the examination, but the submitted work may need to be revised by the date of the clinical, oral and practical for lodging in the Library if the candidate is successful in the examination as a whole.
  - **Fail** (below 50%) – the work is not adequate to enable a candidate to proceed to the remaining sections of the examination for the year in question.

## WRITTEN EXAMINATION

30. Candidates are warned that answers should be given specifically and that illegible handwriting may result in examiners being unable to award marks for information which candidates intended to convey. In addition, the examiners will take into consideration the candidate's spelling and whether or not the question has been answered in the form requested.

### Format

31. This Section consists of 2 three-hour written papers.
- (a) **Paper I** - will cover the basic sciences as applicable to the subject; the paper will comprise a choice of 2 essay-type questions (1½ hours) and 10 compulsory short-answer questions (1½ hours);
  - (b) **Paper II** - will cover the clinical aspects of the subject, and will consist of 6 questions of which 5 are to be answered.

### Marks Scheme for the Written Papers

32. The marks for the written papers are broken down as follows:
- Paper I** will be marked out of 50 marks
  - Paper II** will be marked out of 50 marks
  - Total Mark for this Section (b) = 100 marks

## CLINICAL, ORAL AND PRACTICAL EXAMINATION

### Format

33. The clinical, oral and practical examination will extend over approximately 3 hours for each candidate. Candidates should normally attend equipped to carry out clinical examinations, but advice will be given prior to the examination. Questions may be asked in relation to the Dissertation submitted for Section A.
34. There will be an objective practical and this may involve examination of live animals;
- a 'steeplechase' – examination of radiographs, ultra-sonographic images, scintigraphic images, videos for discussion;
  - an oral examination focussing on basic science, the submitted work and finally clinical issues.

## Marks Scheme

35. The breakdown of marks for the clinical/oral/practical is as follows:
- Clinical: marked out of 50
  - Practical: marked out of 25
  - Oral: marked out of 25
- TOTAL Mark for Section (c) = 100. nb. Candidates **MUST** achieve 50% of the marks for each part, in order to pass this section of the examination.

## SYLLABUS AND READING LIST

36. A syllabus, with a brief commentary, and reading lists for the Certificates, which were frozen at November 2002, are provided for reference. There are no separate reading lists for the Diplomas as candidates at this level are expected to be familiar with all literature in the area of their elective and most particularly so in the topic of their dissertation or submitted papers. Candidates are expected to do their own research and make use of the RCVS Library and Information Service.

## ADVISERS

37. Candidates are urged to seek advice from their advisers. Candidates should approach someone listed in the lists of Diplomates or Specialists in the RCVS Register of Members to seek their agreement to act in this capacity. The adviser should signify their willingness to act by signing the enrolment application Form E1. Alternatively, if a candidate has been unable to find an adviser, the Board will make a suggestion.
38. It is stressed that it is for the candidate to make contact with their adviser throughout the preparations for the examination and to travel to meet him if necessary. For those candidates whose circumstances, e.g. a practice situation, do not normally allow interchange of information, availability of literature etc, particularly in 'Basic Science' areas, it is necessary for some association with a Veterinary School or The Animal Health Trust, through an appointed adviser. It is especially recommended for candidates for Equine Surgery (Orthopaedics) that they seek advice both from a clinical adviser and a specialist involved in research work related to the musculoskeletal system. Advisers will advise a candidate on the suitability of material for the dissertation and **MUST** certify on the declaration that they have approved the dissertation prior to submission for the examination.
39. It has been the experience of the Examiners that, candidates who do not liaise with their advisers well in advance of their entry to the examination, are more likely to be unsuccessful in the examination.

40. Advisers will not be held responsible for the candidate's performance in an examination.

#### **ATTENDANCE AT SHORT COURSES**

41. The Board is not making attendance at any particular course or courses compulsory in terms of the byelaws.

#### **MEMBERSHIP OF VETERINARY ASSOCIATIONS/SOCIETIES**

42. Enrolled candidates are encouraged to become a Member of the British Equine Veterinary Association and attend meetings.

#### **ABBREVIATION FOR QUALIFICATION**

43. Successful candidates should use the following abbreviations after their names in the RCVS Registers of Members, and on practice plates, stationery, etc.. Certificate holders who obtain the Diploma in the same subject cease to use the Certificate abbreviation:

- |  |                |
|--|----------------|
| - <b>Diploma in Equine Orthopaedics</b>        | - <b>DEO</b>   |
| - <b>Diploma in Equine Soft Tissue Surgery</b> | - <b>DESTS</b> |
| - <b>Diploma in Equine Internal Medicine</b>   | - <b>DEIM</b>  |
| - <b>Diploma in Equine Stud Medicine</b>       | - <b>DESM</b>  |

Originated December 1993

Revised: July 1994, June 1995, July 1996, February 1997, August 1998, August 1999, July 2000, April 2001, Nov 2001, Nov 2002. Nov 2003. No Amendments 2004. Amended Nov. 2005. Amended Nov. 2006.

## GENERAL GUIDANCE NOTES FOR DIPLOMA CANDIDATES ON THE PREPARATION OF A DISSERTATION

B.3

*The dissertation should be presented in the normal format for a scientific article unless there are strong reasons why this is not appropriate; any different format should be approved by the supervisor before the first draft is produced.*

The normal sections are:

### Introduction

This should include a brief review of the literature on the subject giving appropriate references. References may be cited in one of two ways e.g. 'Smith and Brown (1993) found that parasites increased in July' or 'Previous studies have shown that parasites increased in July (Smith and Brown, 1993)'.

It should be a critical review to indicate what is already known and where the gaps are in our knowledge which you have set out to remove. At the end of the introduction, it should be possible to say ' In the light of the literature I have reviewed, the aims of this study are to plug the following gaps by carrying out the following work' or something to the same effect!

### Materials and methods

This should include an account of the animals or flocks or specimens used and the experimental methods and techniques you have used in order to obtain your results. There is no need to give details of well-known techniques but it is important that a reader should be able to repeat the work and certainly be able to decide on the reliability of your techniques, which obviously affect the value of your results. If you use techniques developed by other people, you should refer to a book or journal where the details are published.

### Results

There should be a logical description of what you have found by the techniques you have described. This section may benefit by the inclusion of tables, graphs, figures or photographs which should have captions which are sufficiently self-explanatory to stand alone, though they should also be referred to in the appropriate part of the text. This section should not contain any comments on the significance of the results or to any inconsistencies or problems encountered.

### Discussion

This section should contain a critical discussion of the significance of the results and of the extent to which the aims described in the introduction have been achieved. It should also relate the new findings to previous work and it may therefore be necessary to quote again some of the papers cited in the introduction but for a different purpose. In the introduction, it was to show where the gaps were, here it is to show how your results agree, disagree or add to the previous work. Any conclusions or new ways of tackling the problem should be indicated here.

## **References**

Unfortunately, there are a number of different ways used by different journals to list references in this list, so it isn't possible to lay down the one correct way! Since you might also wish to write your work as a paper for a journal, however, it is best to use a style which can be adapted to any journal, which means that the reference should be cited in full as follows:

Smith, M. J. and Jones, W. B. (1993). The seasonal fluctuations in parasite numbers in sheep in Britain. *Veterinary Record*, 134, 123 - 134.

A very careful check should be made to ensure that the references in the text are exactly the same as those in the list. (Trying this out on articles in any journal will give you a good idea as to the care with which the articles are edited by the authors or the journal).

## **Acknowledgements**

This section gives you the opportunity to thank anyone who has helped with the work or the dissertation.

## **Appendices**

If there is a great deal of detailed data such as laboratory findings, it may be helpful to place most of it in appendices with only summaries such as mean values in the results section.

## **DIPLOMA IN EQUINE STUD MEDICINE**

### **Syllabus and Commentary**

#### **Commentary**

The Syllabus for the written/practical and oral examination in Equine Stud Medicine focuses in great detail on those aspects veterinary science related to this discipline.

Candidates are expected to have a detailed, up-to-date theoretical knowledge and understanding of the subject derived from reading specialist textbooks, relevant journals and attendance at meetings. In addition, they must demonstrate a very high level of practical knowledge and skills derived from a substantial involvement in the discipline in a specialist equine practice or veterinary centre. The level of knowledge and expertise must be that of someone who will be accepted nationally, and probably internationally, as an expert in the discipline.

The dissertation must embody a report of a clinical or experimental study, together with a critical review of the literature and a discussion of the relevance of the study to previously published work. It must be of a standard acceptable for publication in a refereed journal.

## DIPLOMA IN EQUINE STUD MEDICINE

### Syllabus

#### 1. General

- (a) General knowledge of the equine industry in the UK, breeds of horses, general management of the stabled horse and the horse at grass.
- (b) Manifestations of clinical disease; clinical problems, their pathophysiology and diagnostic approach.
- (c) Clinical care; principles and techniques applicable to practice.
- (d) Clinical pathology; techniques of sampling and sample handling.  
Interpretation of haematological, biochemical and endocrine tests.  
Principles and applications of diagnostic microbiology, cytology and histology.  
Ancillary diagnostic tests.
- (e) Diagnostic imaging; principles and applications of specialised imaging techniques (radiology, ultrasonography transvaginal ultrasound-guided needle aspiration, endoscopy and scintigraphy.)  
Selection and limitations of procedures used for diagnosis.
- (f) Stable vices.
- (g) Physical and chemical restraint.
- (h) Welfare, the normal behaviour of horses and assessment of abnormal behaviour patterns.  
The assessment of pain, suffering and stress.  
The basic needs of the horse.  
Welfare aspects of stabling, transportation, competition and general care of horses.  
Legislation affecting the welfare of horses.

#### 2. The Stallion

- a) Normal anatomical and microscopic anatomy, physiology and pathology of the genital system of the pre- and post-pubertal horse.
- b) The endogenous sources and functions of the gonadotrophic and gonadal hormones and factors governing their synthesis, secretion, action, interaction and exogenous administration in the control of reproduction.

Endocrine and other factors affecting libido, mating behaviour, semen quality and fertility.

- c) The collection and evaluation of semen. Chilling and freezing of stallion semen. The methods used in artificial insemination with fresh, chilled and frozen semen. Problems associated with equine artificial insemination.
- d) Theoretical and practical considerations of diagnosis, treatment and management of clinical abnormalities affecting the structure and function of the genital organs and the performance and fertility of stallions.

### 3. **The Mare**

- a) The normal anatomical and histological structure, physiology and pathology of the genital system of the pre- and post-pubertal female horse. The endogenous sources and functions of the gonadotrophic and ovarian hormones and factors governing their synthesis, secretion, action, interaction and exogenous administration in the control of reproduction.
- b) The preparation of mares for artificial insemination with fresh, chilled and frozen semen.
- c) Theoretical and practical considerations of the diagnosis, treatment and management of clinical conditions affecting the structure and function of genital organs and the fertility of mares.
- d) The physiological and pathological changes which may occur during pregnancy and parturition. Theoretical and practical consideration of the diagnosis, treatment and management of pregnancy failure.
- e) Clinical and endocrine aspects of parturition, the assessment of "readiness for birth" and abnormal conditions of the mare and foal associated with foaling.
- f) Physiology and pathology of the new born foal and conditions affecting its adaptation to the extra-uterine environment.
- g) The epidemiology, microbiology and serology of infections associated with infertility in horses.
- h) Surgical procedures applicable to broodmares, including specialised perineal, rectovaginal and cervical surgery, caesarian section and surgical correction of perinatal uterine emergencies.
- i) Application of new techniques to increase the efficiency of equine reproduction, including embryo transfer.
- j) Ultrasound examination of genital tract.

#### 4. **The Foal and Yearling**

- (a) The normal anatomical structure, physiology and pathology of the foal.
- (b) The normal growth and development pattern for the foal and yearling, including physiological and pathological changes which occur during the growth period.
- (c) Theoretical and practical considerations of the diagnosis, treatment and management of clinical conditions affecting the foal and yearling, including detailed knowledge of intensive care procedures in the neonatal foal.
- (d) Detailed knowledge of epidemiology and microbiology of infections affecting foals and yearlings.
- (e) Surgical procedures applicable to young foals.

#### 5. **Techniques and procedures**

Candidates should be generally competent and experienced in the performance of the relevant techniques and procedures and should obtain certification to this effect (for submission to the Equine Board) from their advisor or from a senior veterinary member of staff of the practice/centre, in respect of each of the following:

- i) The Stallion
  - a) Examination of external and internal genital organs.
  - b) Diagnosis and treatment of venereal infections.
  - c) Methods of semen collection, handling and in-field microscopic examination. Preparation of semen for artificial insemination.
- ii) The Mare
  - a) Rectal and vaginal examination of genital organs and interpretation of findings relating to ovarian and uterine palpation in all stages of the oestrous cycle, during pregnancy and post-partum.
  - b) Collection of samples from the genital tract for laboratory examination for bacteriology, cytology and histopathology, examination and interpretation.
  - c) Surgical and medical treatments of all parts of the genital tract, including vulval surgery, corrective manipulations in dystocia, fetotomy.
  - d) General techniques of artificial insemination with fresh, chilled and frozen semen.
- iii) The Foal
  - a) Techniques employed in the treatment of common disorders in the foal.

SPECIALISATION AND FURTHER EDUCATION

**CERTIFICATE IN EQUINE MEDICINE (STUD MEDICINE)**

**Syllabus and Commentary**

**Commentary**

The syllabus for the Certificate in Equine Medicine covers those aspects of veterinary science that relate to normal function, medical diseases and disorders of the respiratory, cardiovascular, gastrointestinal, urinary, nervous and reproduction systems, together with a general knowledge of horse breeding as practised in the UK.

All candidates are expected to have a level of theoretical and practical knowledge of all parts of the syllabus, derived from substantial practical experience at a level equivalent to that of the Certificate in Equine Practice. In their elective subject, Stud Medicine candidates are expected to have a theoretical and practical knowledge greater than that required for the Certificate in Equine Practice, based on substantial practical experience working in the subject area. This is most likely to be gained if the candidate has had a major commitment, in terms of time, in a dedicated equine practice or centre. The level of knowledge or expertise is not expected to be that of someone deemed to be an expert or specialist in the discipline.

Originated 1994  
Reformatted October 1998  
Revised July 1999  
Revised July 2000 (typo amendments)  
Revised November 2001  
Revised November 2003

**CERTIFICATE IN EQUINE MEDICINE (STUD MEDICINE)**

**Syllabus**

**1. General**

- (a) General knowledge of the equine industry in the UK, breeds of horses, general management of the stabled horse and the horse at grass.
- (b) Manifestations of clinical disease; clinical problems, their pathophysiology and diagnostic approach.
- (c) Clinical care; principles and techniques applicable to practice.
- (d) Clinical pathology; techniques of sampling and sample handling.  
Interpretation of haematological, biochemical and endocrine tests.  
Principles and applications of diagnostic microbiology and cytology.  
Ancillary diagnostic tests.  
Surgical procedures applicable to stallions.
- (e) Diagnostic imaging; principles and applications of the common imaging techniques (radiology, ultrasonography, endoscopy.)  
Selection and limitations of procedures used for diagnosis.
- (f) Stable vices.
- (g) Physical and chemical restraint.
- (h) Welfare, the normal behaviour of horses and assessment of pain, suffering and stress.  
The basic needs of the horse.  
Welfare aspects of stabling, transportation, competition and general care of horses.  
Legislation affecting the welfare of horses.

**2. The Stallion**

- (a) Normal structure and function of the genital system, including its endocrine control and factors affecting libido, mating behaviour, semen quality and fertility.
- (b) Collection and evaluation of semen; methods used in artificial insemination of fresh, chilled and frozen semen.

- (c) Diagnosis, treatment and management of clinical conditions affecting the structure and function of genital organs and the performance and fertility of stallions.

### 3. **The Mare**

- (a) Normal structure and function of the genital system, including structural and functional changes and endogenous and exogenous endocrine control.
- (b) Diagnosis, treatment and management of clinical conditions affecting the structure and function of genital organs and fertility.
- (c) The physiology and pathology of pregnancy, including the techniques of pregnancy diagnosis.  
The causes of pregnancy wastage.
- (d) Clinical and endocrine aspects of parturition and abnormal conditions of the mare and foal associated with foaling.
- (e) Surgical procedures applicable to broodmares.
- (f) Techniques of artificial insemination and embryo transfer.

### 4. **The Foal**

Diagnosis, treatment and management of conditions affecting the foal at birth and during its development to approximately 18 months of age.

### 5. **Management of Stud farms**

Stud farm organisation, breeding and rearing procedures, grassland management, nutrition and preventive medicine.

### 6. **Techniques and procedures**

Candidates should be generally competent and experienced in the performance of the relevant techniques and procedures, and should obtain certification to this effect (for submission to the Equine Board) from their advisor or from a senior veterinary member of staff of the practice/centre, in respect of each of the following:

- i) The Stallion
  - a) Examination of external genital organs.
  - b) Diagnosis and treatment of venereal infections.
  - c) Methods of semen collection, handling and in-field microscopic examination.
  - d) General techniques of AI using fresh, chilled and frozen semen.

- ii)      The Mare      a)      Rectal and vaginal examination of genital organs (syllabus 5.ii.a) including pregnancy of diagnosis at varying stages of gestation.
  - b)      Collection of samples from the genital tract for laboratory examination for bacteriology, cytology and histopathology.
  - c)      Medical and surgical treatments of all parts of the genital tract (syllabus 5.ii.c).
  - d)      General techniques of AI using fresh, chilled and frozen semen.
  
- iii)     The Foal      a)      Intensive care of the foal and yearling.
  - b)      Diagnosis and treatment of common disorders of the foal and yearling.

Originated 1994  
Reformatted October 1998  
Revised July 1999  
Revised July 2000 (typo amendments)  
Revised November 2001  
Revised November 2003  
Revised November 2005

## RCVS Diploma/Certificate in Equine Stud Medicine

### Reading List

Candidates should note that the reading lists for the Equine Certificates/Diplomas were frozen in 2002 and will eventually be withdrawn. Candidates are expected to research the literature for themselves and are recommended to make use of the RCVS Library and Information Service for this purpose (<http://www.rcvslibrary.org.uk> , e-mail - [library@rcvs.org.uk](mailto:library@rcvs.org.uk) or telephone 020 7222 2021). Candidates should also seek advice on suitable reading matter from their Advisers.

Blanchard, T.L. & Varner, D.D. (1992) Stallion Management. The Veterinary Clinics of North America: Equine Practice. 8.1. W.B. Saunders, Co.

Blanchard, T. L., Varner, D. D. and Schumacker, J. (1998) Manual of Equine Reproduction. Mosby.

British Equine Veterinary Association (1991) Codes of Practice for Veterinary Surgeons and Breed Societies in the United Kingdom and Ireland using Artificial Insemination for Breeding Equids. BEVA.

Cox, J. E. (1982) Surgery of the reproductive tract in large animals. Liverpool University Press.

Ginther, O.J. (1992) Reproductive Biology of the Mare, Basic and Applied Aspects. 2nd Edition. Equiservices.

Ginther, O.J. (1995) Ultrasonic Imaging and Reproduction: Fundamentals, Book 1 Equiservices Publishing, 4343 Garfoot Road, Cross Plains, Wisconsin 53528, USA.

Ginther, O.J. (1995) Ultrasonic Imaging and Reproduction: Horses, Book 2 Equiservices Publishing, 4343 Garfoot Road, Cross Plains, Wisconsin 53528, USA.

Horserace Betting Levy Board (2000 - reviewed annually) Common Codes of Practice for the Control of Contagious Equine Metritis and other Reproductive Diseases and Equine Viral Arteritis for the 2000 Breeding season in France, Germany, Italy, Ireland and United Kingdom.

(Horserace Betting Levy Board Code of Practice is reviewed annually and the 2000 edition will be published in November 2000).

Knottenbelt, D.C. & Pascoe, R.R. (1994) Color Atlas of Diseases and Disorders of the Horse. Wolfe.

Kobluk, C.N., Ames, T.R. & Geor, R.J. (1995) The Horse, Diseases and Clinical Management.

Koterba, A.M., Drummond, W.H. & Kosch, P.C. (1990) Equine Clinical Neonatology. Lea & Febiger.

Madigan, J. E. (1994) Manual of Equine Neo-natal Medicine. Live Oak Publishing, California.

Mair, T. S., Love, S., Schumacher J, and Watson, E. (1998) Equine Medicine, Surgery and Reproduction. W. B. Saunders Co. Ltd.

McEntee, K. (1990) Reproductive Pathology of Domestic Animals. Academic Press.

McKinnon, A.O. & Voss, J.L. (1993) Equine Reproduction. Lea & Fabiger.

Proceedings of International Symposia on Equine Reproduction. Equine Reproduction I-VII. Journal of Reproduction and Fertility. (Most recent Symposium having been held in Pretoria, South Africa as at August 1998).

Ricketts, S.W., Barrelet, A., Barrelet, F.E. & Stoneham, S.J. (1995) The Stallion and Mare Reproductive System. In the Equine Manual., Ed. A.J. Higgins & I.M. Wright. W.B. Saunders, Co., 593-636.

Robinson, N.E. (1992) Current Therapy in Equine Medicine. 3. W.B. Saunders Co.

Rossdale, P.D. & Ricketts, S.W.(1980) Equine Studfarm Medicine, 2nd Edition, Bailliere Tindall (out of print).

Trotter, G.W. (1988) Urogenital Surgery. The Veterinary Clinics of North America: Equine Practice. 4:3. W.B. Saunders, Co.

Vaala, W.E., Marr, C.M., Maxon, A.D. & Sertich, P.L. (1995) Perinatology. In the Equine Manual, Ed. A.J. Higgins & I.M. Wright. W.B. Saunders, Co. 593-636.

Varner, D. D., Schumacher, J., Blanchard, T. L. and Johnson, L (1991) Diseases and Management of Breeding Stallions. American Veterinary Publications.

### **Multi-Media Modules on CD-ROM**

A set of 4 CD-ROMs, following the syllabus of the Certificate in Equine Medicine (Stud Medicine), from Sidney Ricketts, FRCVS, Rossdale and Partners, Beaufort Cottage Equine Hospital, Cotton End Road, Exning, Newmarket, CB8 7NN.

**Journals** - *Candidates are encouraged to read about their subject in current Journals*

EVJ & Supplements

EVE

Theriogenology

In Practice

Proc. Soc. for Theriogenol.

Proc. AAEP

Revised June 1995/Revised July 1996/Revised August 1998/Revised July 1999/Revised July 2000

**EQUINE DIPLOMAS – READING LISTS**

There are no separate reading lists for the Diplomas as candidates at this level are expected to be familiar with all literature in the area of their elective and most particularly so in the topic of their dissertation or submitted papers. Candidates are recommended to make use of the RCVS Library and Information Service for this purpose (<http://www.rcvslibrary.org.uk> , e-mail - [library@rcvs.org.uk](mailto:library@rcvs.org.uk) or telephone 020 7222 2021). Candidates should also seek advice on suitable reading matter from their Advisers.

April 2003

**DIPLOMA IN EQUINE STUD MEDICINE**

**Details of the veterinary practice in which experience is being gained to meet the requirements of the byelaws (see schedules) including at least three years of substantial experience in the subject concerned.**

*(If more than one establishment, please photocopy this form and complete in respect of each such establishment)*

1. Name of practice and address

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2. Date of commencement  
of employment \_\_\_\_\_

(and date of leaving if you are no longer employed at this  
address: \_\_\_\_\_ )

3. Numbers of veterinary surgeons usually working in your place of employment

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4. Approx. total practice case load per month

which includes \_\_\_\_\_ equine cases per month.

5. Proportion of the practice case load which you personally undertake:

\_\_\_\_ % of total cases per month (= approx. \_\_\_\_ cases per month)

\_\_\_\_ % of total equine cases per month (= approx. \_\_\_\_ equine cases per month)

6. Equipment and facilities available for the examination and medical and surgical treatment of equine cases.

7. Please describe overleaf the range of equine cases with which you deal, and give the percentage of your time which you spend on equine work.

(if more than one practice is concerned, a separate copy of this form should be completed in respect of each such practice.)

Signature

Date

**Please enclose SAE for acknowledgement**



8. Please describe the range of equine cases with which you deal, and give the percentage of your time which you spend on equine work.

(if more than one centre is concerned, a separate copy of this form should be completed in respect of each such practice.)

Signature

Date

**Please enclose SAE for acknowledgement**

**DIPLOMA IN EQUINE STUD MEDICINE**

**Dissertation**

**PLEASE SUBMIT ORIGINAL PLUS TWO COPIES OF ALL FORMS**

Application to be completed and returned to the RCVS, Belgravia House, 62-64 Horseferry Road, London SW1P 2AF **no later than 1 November** .

1. **NAME** in full (block letters)
  
2. **PROPOSED TITLE FOR DISSERTATION** - giving a brief outline

Signature \_\_\_\_\_ Date \_\_\_\_\_  
**Please enclose SAE for acknowledgement**





If there has been any change in the work-load of the establishment, or in your personal work-load, since you applied for enrolment, please give details below:

**7. ATTENDANCE AT RELEVANT SHORT COURSES**

Title of course attended: \_\_\_\_\_

Dates and venue: \_\_\_\_\_

*Please send a photocopy of your RCVS CPD Record Card for all CPD events attended for the period of experience you are offering.*

**8. OTHER INVOLVEMENT IN RELATION TO EQUINE STUD MEDICINE**

List any attendances at relevant congresses, conferences, meetings, symposia, etc., with dates:

**9. PUBLICATIONS/ARTICLES/PAPERS/LECTURES**

Give details below (including any involvement in the instruction of others):

**10. OTHER POSTGRADUATE STUDIES**

During the period of experience being offered, have you been or are you studying for any other postgraduate qualification? YES/NO

If yes, please give brief details:

11. **SUBMITTED WORK**

The subjects of the **two** first author papers and **three** principal author papers case report which I intend to submit for the examination are as follows:-

12. **I HEREBY APPLY FOR FINAL APPROVAL OF EXPERIENCE AND FOR PERMISSION TO SUBMIT AN ENTRY TO THE NEXT DIPLOMA EXAMINATION IN EQUINE STUD MEDICINE**

I certify that the period of experience being offered has not been/is not being offered to meet the requirements of the byelaws for any other RCVS Certificate or Diploma.

*Delete section 12 if you do not intend to sit the next examination.  
Please note that only those candidates who now confirm their intention to sit will have their examination entry accepted at the closing date.*

13. **CONFIRMATION OF INTENT TO SIT THE EXAMINATION**

I confirm my intention, if approval of experience is granted, of submitting an entry to the next examination.

Signature \_\_\_\_\_ Date \_\_\_\_\_

**Please enclose SAE for acknowledgement**

**The following section should be completed by your Adviser.**

I confirm that I am acting as this candidate's Adviser.

Name \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

**EQUINE BOARD  
DIPLOMA IN EQUINE STUD MEDICINE  
Techniques and procedures**

I CERTIFY THAT THE CANDIDATE NAMED BELOW IS GENERALLY COMPETENT AND EXPERIENCED IN THE PERFORMANCE OF THE TECHNIQUES AND PROCEDURES RELEVANT TO THE FOLLOWING AND I HAVE COUNTERSIGNED BELOW:

	Techniques and Procedures	Signature *	Date of Signing
<b>i.</b>	<b>The Stallion</b>		
	a. Internal genital organs - recognition of relevant land- marks per rectum.		
	b. Detailed microscopic examination and evaluation of semen.		
<b>ii.</b>	<b>The Mare</b>		
	a. Proficient use and interpretation of real time ultrasound echography.		
	b. Performance and assessment of results of basic lab techniques associated with the genital tract including bacteriology, cytology and histology.		
	c. Perineal restructuring, recto-vaginal fistula repair, clitoral sinusectomy, repair of vaginal and uterine tears, Caesarean section and ovariectomy.		
<b>iii.</b>	<b>The Foal</b>		
	a. Management of maladjusted newborn foals		
	b. Methods of correcting electrolyte and fluid balance, metabolic and respiratory disturbances.		
	c. Placement of vascular catheters.		
	d. Technique of arterio-puncture		
	e. Paracentesis abdominis, arthrocentesis.		
	f. Management of entropion.		

g.Surgical and other methods of correcting limb deformities.		
h.Management of cases of patent bladder, volvulus, intussusception, umbilical and inguinal hernia.		

Candidate \_\_\_\_\_  
full name (surname in block letters)

\* please show name in block  
letters against signature

**DIPLOMA IN EQUINE STUD MEDICINE - ADVISERS**

Candidates should refer to the lists of Specialists and Diploma holders published in Section 3 of the RCVS Register of Members.

April 2003

The Royal College of Veterinary Surgeons

**DIPLOMA IN EQUINE STUD MEDICINE EXAMINATION**

**PAPER I**  
**(Basic Sciences)**

**Tuesday 3 May 1994**

**10.00 a.m. to 1.00 p.m. (3 hours)**

**SECTION A**

**Two long-answer questions of which a candidate must choose one question to answer in approximately 1 1/2 hours**

*Candidates are warned that illegible handwriting may result in examiners being unable to award marks for information which candidates intended to convey*

1. Discuss the role of gestation (conception to parturition) failure in mares as **a cause** of wastage to the Thoroughbred breeding industry. Describe and contrast, in detail, its various causes, their pathophysiology, diagnosis, treatment and prevention.
2. Discuss the term 'developmental orthopaedic disease' as it applies to the growing foal and yearling, and its role as a cause of wastage to the performance horse industries. Compare and contrast the various clinical manifestations of this syndrome and discuss, in detail, their pathophysiology, diagnosis, treatment and prevention.

P.T.O. for Section B

The Royal College of Veterinary Surgeons

**DIPLOMA IN EQUINE STUD MEDICINE EXAMINATION**

**PAPER I**

**(Basic Sciences)**

**Tuesday 3 May 1994**

**10.00 p.m. to 1.00 p.m. (3 hours)**

**SECTION B**

**Ten compulsory short-answer questions to be answered in approximately 1 1/2 hours  
(allowing some 9 minutes for each question)**

*Candidates are warned that illegible handwriting may result in examiners being unable to award marks for information which candidates intended to convey*

3. What are the important environmental and endocrinological factors controlling the mare's transition from winter anoestrus to cyclic oestrus?
4. Define the concept of foeto-maternal 'readiness for birth' and briefly discuss how this state can be assessed in practice.
5. List the stages of spermatogenesis in the horse and discuss how errors in this process can lead to defects in sperm morphology and other seminal abnormalities.
6. Describe the pathogenesis of equine neonatal isoerythrolysis and detail its laboratory diagnosis.
7. What is chronic endometrial degenerative disease ('endometrosis')? Briefly discuss its pathogenesis, laboratory diagnosis and its possible effect on mare fertility.
8. List the variations in the process of ovulation in mares, and discuss their significance in terms of routine ovarian examinations in practical breeding programmes.
9. Describe the process of post-partum uterine involution in mares. Briefly discuss the diagnosis, treatment and management of delays.

**P.T.O. for questions 10, 11 and 12**

10. Discuss the laboratory assessment of the calcium:phosphate balance in growing horses and its interpretation in relation to dietary intakes.
11. Discuss the welfare implications of maintaining teaser stallions on stud farms.
12. List, and briefly discuss, the main steps in the selection and preparation of donor and recipient mares for a successful equine embryo transfer programme.

The Royal College of Veterinary Surgeons

**DIPLOMA IN EQUINE STUD MEDICINE EXAMINATION**

**PAPER II**

(Clinical Aspects)  
**Tuesday 3 May 1994**

**2.00 p.m. to 5.00 p.m. (3 hours)**

**This papers consists of six questions of which a candidate must choose five to answer  
(which allows some 35 minutes for each question)**

*Candidates are warned that illegible handwriting may result in examiners being unable to award marks for information which candidates intended to convey*

1. Describe the clinical signs of Equine Viral Arteritis and discuss its diagnosis, treatment, management and prevention. What are the implications of the first confirmed outbreak to the U.K. horse industries?
2. Discuss the decision-making dilemmas faced by obstetricians in cases of equine dystocia, in terms of maximising the chances for mare/foal survival and available choices for treatment.
3. Discuss the limiting factors in ensuring that chilled or frozen semen artificial insemination programmes are successful in horses and the methods that overcome problems.
4. Discuss the clinical aspects of sporadic and epidemic diarrhoea in foals, their causes, diagnosis, treatment and management.
5. Describe the clinical and administrative problems associated with the isolation of *Klebsiella pneumoniae* or *Pseudomonas aeruginosa* from the external genitalia of stallions, before or during the breeding season. Discuss how these problems may be overcome by assessing the significance of isolates, deciding if treatment is required, and if so, by what methods.
6. Discuss the clinical manifestations, diagnosis, treatment and management of a grass sickness (equine dysautonomia) 'epidemic' in mares at stud. What steps would you recommend to the manager to prevent the occurrence of cases in the future?