

**MANUAL OF ADMINISTRATION**  
*for the*  
**CLINICAL PROFICIENCY EXAMINATION**

**2020 Edition**  
(version January 1, 2020)

***For use ONLY in CPE administrations in calendar year 2020***



*Table of Contents for the Manual of Administration*

GENERAL INFORMATION .....	1
<i>Statement of Intent</i> .....	1
<i>Animal Requirements</i> .....	1
<i>Personnel Requirements</i> .....	2
<i>Facilities and Equipment</i> .....	3
<i>Taking Breaks</i> .....	3
<i>Other Policy Information</i> .....	3
<i>General Discussion about the CPE</i> .....	3
<i>Disabled or Pregnant Candidates Requesting Testing Accommodations</i> .....	4
<i>Rules of Conduct</i> .....	5
<i>Layout of CPE</i> .....	8
<i>Information Supplied to Candidates</i> .....	9
<i>Requirements of Candidates</i> .....	9
<i>Supplies Candidates Must Provide</i> .....	9
<i>Assessment of Candidates</i> .....	10
<i>Other Considerations in Candidate Assessment</i> .....	10
<i>Passing Standard and Score Reporting</i> .....	11
<i>Candidates Not Passing All Sections</i> .....	11
<i>Use of Reference Material</i> .....	11
<i>Extended score reports to candidates</i> .....	11
<i>Common Diagnoses/Conditions</i> .....	12
<i>References for the CPE</i> .....	12
<i>Standard Script for General Candidate Orientation to the CPE and the Examination Site</i> .....	14
ANESTHESIA .....	17
<i>Competencies</i> .....	17
<i>Time</i> .....	17
<i>Set-up Information</i> .....	17
<i>General Requirements of the Candidate</i> .....	18
<i>Overview of the Anesthesia Section</i> .....	19
<i>Standard Script for Drug Protocol and Dose Calculations Station</i> .....	21
<i>Standard Script for Anesthesia Section—Preanesthetic Exam to Maintenance Phase</i> .....	22
<i>Assessment Sheet for Anesthesia (AN01)</i> .....	24
<i>Anesthesia Appendices</i> .....	34
Appendix 1—Fatal Flaw List .....	34
Appendix 2—Preanesthetic Physical Status .....	35
Appendix 3—Anesthesia Record .....	37
Appendix 4—Anesthesia Equipment Incident Report .....	42
EQUINE PRACTICE .....	43
<i>Competencies</i> .....	43
<i>Time</i> .....	43
<i>Set-up Information</i> .....	43
<i>General Requirements of the Candidate</i> .....	44
<i>Station One—Clinical Evaluation</i> .....	44

Overview of Station One .....	44
Standard Script for Station One .....	45
Assessment Sheet for Equine Practice—Station One (EQ01) .....	45
<i>Station Two—Clinical Techniques</i> .....	50
Overview of Station Two .....	50
Standard Script for Station Two .....	50
Assessment Sheet for Equine Practice—Station Two (EQ02) .....	50
<i>Station Three—Lameness Evaluation</i> .....	54
Overview of Station Three .....	54
Standard Script for Station Three .....	54
Assessment Sheet for Equine Practice—Station Three (EQ03) .....	55
<i>Equine Practice Summary Score Sheet</i> .....	58
<i>Equine Practice Appendices</i> .....	60
Appendix 1—Blank Page for Candidate Notes .....	60
<b>FOOD ANIMAL PRACTICE</b> .....	62
Competencies .....	62
Time .....	62
Set-up Information .....	62
General Requirements of the Candidate .....	63
<i>Station One—Clinical Case, Bovine</i> .....	63
Overview of Station One .....	63
Standard Script for Station One .....	64
Assessment Sheet for Food Animal Practice—Station One (FAP01) .....	64
<i>Station Two—Clinical Case, Other Food Animal</i> .....	68
Overview of Station Two .....	68
Standard Script for Station Two .....	68
Assessment Sheet for Food Animal Practice—Station 2 (FAP02) .....	68
<i>Station Three—Clinical Procedures</i> .....	72
Overview of Station Three .....	72
Standard Script for Station Three .....	73
Assessment Sheet for Food Animal Practice—Station 3 (FAP03) .....	73
<i>Station Four—Bovine theriogenology and public health, food safety, and regulatory issues</i> .....	77
Overview of Station Four .....	77
Standard Script for Station Four, part A .....	77
Standard Script for Station Four, parts B and C .....	78
Assessment Sheets for Food Animal Practice—Station 4 (FAP04/FAP05) .....	78
<i>Food Animal Practice Summary Score Sheet</i> .....	82
<i>Food Animal Practice Appendices</i> .....	83
Appendix 1—Candidate Worksheet—Food Animal Practice (Stations 1 & 2) .....	83
Appendix 2—Candidate Answer Sheet—Food Animal Practice Station 4, Part C .....	86
<b>NECROPSY</b> .....	88
Competencies .....	88
Time .....	88
Set-up Information .....	88
General Requirements of the Candidate .....	89
Overview of Necropsy Section .....	89
Standard Script for Necropsy Section .....	90
Assessment Sheet for Necropsy (NEC01) .....	91
Necropsy Appendices .....	98

Appendix 1—Fatal Flaw List.....	98
Appendix 2—Necropsy Report Form .....	99
RADIOGRAPHIC POSITIONING .....	102
<i>Competencies</i> .....	102
<i>Time</i> .....	102
<i>Set-up Information</i> .....	102
<i>General Requirements of the Candidate</i> .....	102
<i>Overview of Radiographic Positioning Section</i> .....	103
<i>Standard Script for Radiographic Positioning Section</i> .....	104
<i>Assessment Sheet for Radiographic Positioning (RAD01)</i> .....	104
SMALL ANIMAL MEDICINE .....	107
<i>Competencies</i> .....	107
<i>Time</i> .....	107
<i>Set-up Information</i> .....	107
<i>General Requirements of the Candidate</i> .....	108
<i>Station One—Clinical Evaluation</i> .....	108
Overview of Station One .....	108
Standard Script for Station One .....	109
Assessment Sheet for Small Animal Medicine—Station One (SAM01) .....	109
<i>Station Two—Medical Management</i> .....	114
Overview of Station Two.....	114
Standard Script for Station Two .....	115
Assessment Sheet for Small Animal Medicine—Station Two (SAM02).....	116
<i>Station Three—Clinical Techniques</i> .....	118
Overview of Station Three.....	118
Standard Script for Station Three .....	118
Assessment Sheet for Small Animal Practice—Station Three (SAM03).....	119
<i>Small Animal Medicine Summary Score Sheet</i> .....	122
<i>Small Animal Medicine Appendices</i> .....	123
Appendix 1—History and Physical Examination Form.....	123
Appendix 2—Prescription Form.....	125
Appendix 3—Medical Management and Treatment Order Form.....	126
SURGERY .....	133
<i>Competencies</i> .....	133
<i>Time</i> .....	133
<i>Set-up Information</i> .....	133
<i>General Requirements of the Candidate</i> .....	134
<i>Overview of the Surgery Section</i> .....	135
<i>Standard Script for Surgery Section</i> .....	136
<i>Assessment Sheet for Surgery (SU01)</i> .....	137
<i>Surgery Appendices</i> .....	142
Appendix 1—Fatal Flaw List.....	142

## GENERAL INFORMATION

### Statement of Intent

The Clinical Proficiency Examination (CPE) is an examination for international veterinary graduates wishing to gain educational equivalency or pursue licensure in the United States or Canada, respectively, and who have not graduated from a veterinary school accredited by the American Veterinary Medical Association (AVMA) Council on Education (COE). In some instances, the Canadian National Examining Board (NEB) also uses the CPE for examination of graduates of veterinary schools accredited by the AVMA COE who have not been successful on the national licensure examination. The CPE is intended to assess the practical clinical veterinary skills of an “entry-level” veterinarian (i.e., a new graduate of an AVMA/COE-accredited school). Each site administering the CPE must comply with all laws within their jurisdiction (e.g., those relating to animal use and drug availability). Further, a site must report any legally necessary deviation from this Manual of Administration to the AVMA’s Educational Commission for Foreign Veterinary Graduates (ECFVG) or to the NEB for final approval. The ECFVG and NEB will notify candidates of legally necessary deviations.

### General Requirements for CPE Sites—

In order for any entity to become a CPE provider, three resource areas must be assured. The site must provide appropriate animals and their care; qualified personnel; and adequate facilities and equipment. The *CPE Manual of Administration* (MOA) describes specific sections and skills to be assessed and serves as the guide for administering the CPE to all candidates. The ECFVG recognizes that there are variables that cannot be controlled completely (e.g., the temperament of the animals used, equipment malfunction, etc.), but expects that each site will adhere as closely as possible to the standards set forth in the CPE Manual. All CPE sites (existing or new) must agree to be monitored by the Educational Commission for Foreign Veterinary Graduates (ECFVG) or the National Examining Board (NEB) of the Canadian Veterinary Medical Association. The process for monitoring CPE sites is described in the ECFVG document titled *Quality Assurance for the CPE—Site Proposal*, available as an appendix in the CPE Candidate Bulletin at [www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx](http://www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx); see specifically [www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx#cpe-appendix-2](http://www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx#cpe-appendix-2).

Candidates will not be assessed at a CPE examination site if:

- He/she is a graduate of that school/college.\*
- He/she has participated in a clinical training program at that site or school/college.\*
- He/she is an employee or former employee of that site or school/college.\*

\*Exception only for *Université de Montréal, St. Hyacinthe* (French speaking; for NEB purposes only). Candidates may take the CPE at a site at which they took Continuing Education courses, provided that candidates are not tested by the same individual(s) who provided the training. Also, training must have taken place at least six months prior to examination at same site. Candidates are not permitted to take examinations at the same site at which they were a resident or an intern.

### Animal Requirements

It is imperative that the CPE site provide for humane care and treatment of animals. In order to assure proper care and treatment, the following are required:

- Animal resources (species, weights, age, sex, numbers, etc.) must meet the standards set forth in the *CPE Manual of Administration*.

- Local, state, and United States federal animal welfare laws, or similar laws applicable in Canada, must be enforced and the facility must meet the standards of the most current United States Federal Animal Welfare Act or the Canadian Council on Animal Care.

Acceptable sources of live and necropsy animals and bovine fetuses may include the following:

- Those consistent with Provincial Animals for Research Acts
- United States Department of Agriculture, licensed animal dealers
- Purpose bred animals
- Animal Shelters
- Food animal producers
- Livestock sales
- Slaughter houses
- Institution/practice owned
- Donated animals must be accompanied by a signed consent form from the donor.
- Owned animals with signed consent from the owner.

All weights provided for animals used in the CPE will be given in kilograms (kg).

### **Personnel Requirements**

Personnel utilized for administration and scoring of the CPE must possess demonstrated expertise to test entry-level clinical skills of veterinary graduates. The site and section coordinators and examiners must possess well-founded knowledge of the list of common conditions/diseases and pharmaceuticals/biologicals as they pertain to the practice of veterinary medicine in the United States and Canada.

In order to assure adequate personnel, the following minimum standards are required:

- Personnel must be provided as specified in the *CPE Manual of Administration*.
- Four levels of personnel are identified. Each level must meet the minimum standards listed:
  - *Site Coordinator or equivalent*—This person coordinates and manages the activities of the examination site. They must have a DVM degree (or equivalent) with a minimum of five (5) years clinical experience in the United States or Canada in a discipline representing one of the examination sections that make up the CPE. Site Coordinators must also consistently attend CPE Site Coordinators Meetings facilitated by the ECFVG and NEB.
  - *Section Coordinator or equivalent*—This person organizes and sets up the specific section of the examination and is responsible for the overall quality control and administration of that section (see *CPE Manual of Administration*). Section Coordinators must have a DVM degree (or equivalent) and been practicing in the section/discipline within the last 10 years, with a minimum of five (5) years' experience in the section/discipline in the United States or Canada.
  - *Examiner*—This person coordinates and sets up the station with the Section Coordinator, administers the station, and is directly responsible for evaluating the candidates. The examiner also signs off as the primary examiner on all assessment sheets, even when a secondary examiner or veterinary technician takes part in assessing a candidate's performance. Examiners must have a DVM degree (or equivalent) and been practicing in the section/discipline within the last 10 years, with a minimum of two (2) years clinical experience in the section/discipline in the United States or Canada.
  - *Veterinary Technician* - An individual who is credentialed as a veterinary technician or veterinary technologist.

## Facilities and Equipment

The facilities and equipment used in the CPE should meet contemporary practice standards for the US and/or Canada. Facilities refer to structures and equipment refers to movable items used to practice clinical veterinary medicine. CPE sites are expected to comply with the following:

- Facilities and equipment used for the CPE should meet the requirements outlined in the CPE *Manual of Administration*.
- The facilities should assure the safety of personnel and candidates and provide for the safety and welfare of the animals.
- The facilities and equipment should be adequate to examine multiple candidates simultaneously.
- The facilities and equipment may vary slightly between sites in order to comply with all relevant local, state, provincial and United States or Canadian Federal regulations. These requirements include, but are not limited to zoning, radiation safety, personnel and animal safety, animal care and use, and potentially toxic or dangerous substances (anesthetic gases).
- Because candidates are being evaluated on their ability to practice veterinary medicine at the entry level of competence, physical facilities and equipment should be equivalent to those used in a United States or Canadian contemporary veterinary clinical facility.
- Candidates for the examination must be provided with an adequate staging area for orientation, storage, and rest.
- All sites must provide timers, visible to all candidates, for each station or section. Whenever possible, timers should be of the “count-down” variety to allow candidates and examiners alike to clearly see time remaining in station or section.

## Taking Breaks

CPE candidates should make all effort to limit breaks to between CPE sections or stations. If a candidate urgently needs to take a break in the middle of an exam station, he/she should be aware that the timer for that station will continue during that break in accordance with the MOA. Notably, taking a break does not relieve Surgery candidates from maintenance of aseptic technique and the timer will not be stopped for re-gloving, re-gowning, etc. In any instance, if taking a break endangers an animal or creates an inhumane situation as determined by the examiner (e.g., leaving an anesthetized patient unattended), the candidate may receive a fatal flaw for the station or section of the CPE.

## Other Policy Information

For other policy information specific to the CPE, ECFVG candidates are advised to contact the ECFVG office (847-925-8070 or 800-248-2862, ext 6778 or 6682; [ECFVG@avma.org](mailto:ECFVG@avma.org); [www.avma.org/education/ecfvg/default.asp](http://www.avma.org/education/ecfvg/default.asp)) and NEB candidates, the NEB office (613-236-1162, ext 123; [ohoffmann@cvma-acmv.org](mailto:ohoffmann@cvma-acmv.org); <http://www.canadianveterinarians.net/programs/national-examining-board.aspx>).

## General Discussion about the CPE

Candidates are urged to carefully read the CPE Candidate Bulletin (available at [www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx](http://www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx)) and this Manual of Administration (MOA) and understand the skill requirements of the CPE prior to applying for the CPE. In this way, each candidate can begin to critically self-assess his/her competencies to determine those areas of weakness that require further instruction. If further instruction is required, the support and expertise of a veterinary mentor is strongly recommended prior to scheduling and attempting the CPE.

The CPE assesses a subset of the entry-level clinical veterinary skills taught in an AVMA/Council on Education-accredited veterinary school. All candidates taking the CPE are encouraged to critically consider



whether the education they received is sufficient to provide them with the necessary skill level to be successful perform on the CPE. For example, candidates need to have performed small-animal surgery and anesthesia in an instructional or clinical setting with supervision/oversight prior to attempting the CPE. Candidates who do not have hands-on experience in all facets of veterinary medicine, including those tested on the CPE, are encouraged to seek additional clinical instruction prior to attempting the CPE. For example, candidates could contact veterinary schools and colleges or continuing education programs to determine potential clinical training opportunities, if any, and requirements, costs, and restrictions for foreign veterinary graduates.

A candidate preparing to take the CPE should be knowledgeable with the animal species used in this exam. Most emphasis is placed on the dog, cat, horse, and cow with a lesser emphasis on goats, sheep, and pigs. Candidates are advised to focus on these species. A candidate lacking in experience working with any of these species should seek this experience before taking the examination. This may include working with the animals in a non-veterinary capacity doing such things as feeding, cleaning, exercising, restraining, grooming and routine health care (e.g., equine foot care).

Although experience gained from reading material and viewing videotapes, DVDs, CDs, PowerPoints, etc, is helpful in preparing for the CPE, the candidate must not consider these to be a substitute for the “hands-on” clinical instructional experience outlined above.

Communication skills and service to clients are a high priority in veterinary practice in the United States and Canada. Throughout the CPE candidates will be expected to communicate clearly and effectively with a client (role played by the examiner) in order to take an accurate history, and to communicate information to the client including clinical findings, diagnostic plans, test results and interpretation, therapeutic options, and prognosis. Other sections will require the candidate to explain findings to the examiner directly. **Lack of adequate entry-level communication skills in English (or French at the Université de Montréal, St. Hyacinthe for NEB purposes only) will negatively impact a candidate’s performance on the CPE.**

### **Disabled or Pregnant Candidates Requesting Testing Accommodations**

The nature of the CPE necessitates usage of live animals. While every attempt is made by examination personnel to use animals of mild temperament, the behavior of such animals cannot be predicted, and there is a potential hazard to candidates, particularly those who are disabled or pregnant. In addition to the trauma that may result from working with animals, particularly large animals, hazards exist for the unborn child whenever a pregnant candidate is exposed to infectious agents, inhalant anesthetics, radiation and other agents.

Candidates requesting testing accommodations in compliance with the Americans with Disabilities Act (ADA) should refer to the Testing Accommodations procedures outlined in the CPE Candidate Bulletin (available at [www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx](http://www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx); see specifically [www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx#cpe-testing-accommodations](http://www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx#cpe-testing-accommodations)).

A candidate may appeal any decision imposed under the above guidelines by presenting a written statement to the Chair, ECFVG c/o American Veterinary Medical Association, 1931 North Meacham Rd, Suite 100, Schaumburg, IL, 60173-4360 or chairman, NEB c/o Canadian Veterinary Medical Association, 339 Booth St, Ottawa, Ontario, K1R 7K1. ECFVG candidates may also refer to the ECFVG Policies and Procedures Manual at [www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-pp-toc.aspx](http://www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-pp-toc.aspx) for the ECFVG appeal procedure. Appeals may also be sent via E-mail to [ECFVG@avma.org](mailto:ECFVG@avma.org)

**Rules of Conduct**

The ECFVG has established Rules of Conduct to govern administration of the CPE to ensure that no examinee or group of examinees receives unfair advantage on the examination, inadvertently or otherwise.

CPE site team members (i.e., coordinators, examiners, veterinary technicians, and technical assistants) monitor all sections of the CPE. If CPE site team members observe a candidate violating the Rules of Conduct or engaging in other forms of irregular behavior during a CPE, the team members will not necessarily advise the candidate at the time of the examination, but shall report such incidents to the ECFVG (or NEB for Canadian sites). Each report shall be fully investigated, with the ECFVG or NEB making the final decision.

ECFVG testing sites may also utilize video and/or audio recording for the purposes of test security and quality assurance. If there is a reason to believe that the integrity of the examination process is jeopardized, the ECFVG may invalidate all or any part of a CPE administration. If information indicates that continued testing would jeopardize the security of examination materials or the integrity of scores, the ECFVG reserves the right to suspend or cancel any CPE administration.

By applying to take the CPE, a candidate agrees to the following Rules of Conduct:

1. You are the person named on the CPE application.
  - a. **Admission to the CPE**—When candidates arrive at the CPE site for orientation and check in for the full CPE or to retake one or more sections, they must present a photo ID with signature. Acceptable forms of identification include the following forms of unexpired identification:
    - passport;
    - driver's license;
    - national identity card; or
    - other form of unexpired, government-issued identification.

The identification must contain both the candidate's signature and photograph. If a candidate does not bring acceptable identification, he/she will not be admitted to the CPE. In that event, the candidate will be required to reschedule the CPE in accordance with current ECFVG policy.

Candidates will also be required to show photo ID each day of the examination on entry into the secure testing area.

**The candidate's name as it appears on his/her CPE application must match the name on the form(s) of identification exactly. If a candidate's name listed on his/her CPE application is not correct, contact the ECFVG office immediately at [ECFVG@avma.org](mailto:ECFVG@avma.org) or 800-248-2862, ext 6682 or 6778. If you registered to take the CPE through the NEB, please contact the NEB directly at (613) 236-1162.**

2. You will not use a telephone at any time while you are in the secure areas.
3. You will not give, receive, or obtain any form of unauthorized assistance during the testing session, including any breaks. **NOTE:** Talking to another examinee during the examination may be reported as evidence of giving, receiving, or obtaining unauthorized assistance. **Candidates**

**may not discuss the cases with fellow examinees at any time, and conversation among examinees in any language other than English (or French at the Université de Montréal, St. Hyacinthe) is prohibited at all times. CPE site team members will monitor all examinee activity. See “Irregular Behavior” below.**

CPE site team members are not authorized to answer questions from examinees regarding examination content or scoring.

4. You will not have in your possession any formulas, study materials, notes, papers, or electronic devices of any kind unless you are out of the secure testing areas of the CPE site. You will not remove materials in any form (written, printed, recorded, or any other type) from the secure testing area unless instructed to do so by the examiners. You understand and acknowledge that all examination materials remain the property of the CPE site and ECFVG, and you will maintain the confidentiality of the case content for all seven sections of the CPE. You will not reproduce or attempt to reproduce examination materials through memorization or any other means, nor will you provide information relating to examination content that may give or attempt to give unfair advantage to individuals who may be taking the examination, including, without limitation, by posting information regarding examination content on the Internet.
5. **Personal Belongings**—Unless specifically authorized, candidates may not bring personal belongings into secure testing areas of the CPE site. Failure to follow these rules shall constitute a violation of the Rules of Conduct for the administration of the CPE and may lead to adverse action regarding a candidate’s examination. For the CPE, candidates should understand that the entire testing session over the 3- to 4-day testing period, including all breaks, is considered a closed and secure testing session, and that the entire CPE site, including any on-site lunch room, break rooms, and restrooms, is a secure testing area. Therefore, the rules regarding unauthorized possession during the CPE extend to lunch, if lunch is provided on site, and all breaks.

For the CPE, unauthorized **personal belongings** include, but are not limited to:

- mechanical or electronic devices, such as cellular telephones, personal digital assistants (PDAs), watches with computer communication and/or memory capability, electronic paging devices, recording or filming devices, radios;
- outerwear, such as coats, jackets, head wear, gloves;
- book bags, backpacks, handbags, briefcases, wallets; and
- books, notes, study materials, or scratch paper.

If candidates bring any personal belongings to the CPE site, they must store them in a designated locker or storage cubicle as directed by the CPE site team. All stored mechanical or electronic devices must be turned off. Upon reasonable suspicion, a candidate’s personal belongings and their contents may be inspected. Any materials that reasonably appear to be reproductions of any case material specific for the CPE administration in which a candidate is participating will be confiscated. Making notes of any kind during the CPE, except on the materials provided by the CPE site for this purpose, is not permitted. If candidates have any questions regarding the appropriateness of personal belongings to be brought into the CPE site, contact the ECFVG or a CPE site team member prior to admission.

6. **Irregular Behavior**—Irregular behavior consists of any action by CPE candidates or others that subverts or attempts to subvert the examination process, including, without limitation:
- Falsification of information on the application form, including additional documentation, or failure to provide the ECFVG with information material to your application.
  - Impersonating an examinee or engaging someone else to take the examination for you.
  - Giving, receiving, or obtaining unauthorized assistance during the examination, or attempting to do so.
  - Unauthorized possession, reproduction, or disclosure of any materials, including, but not limited to, examination cases, before, during, or after the examination.
  - Making notes of any kind during an examination except on the writing materials provided by the CPE for that purpose.
  - Disruptive or unprofessional behavior at a CPE site.
  - Offering any benefit to any CPE site team member or agent of the ECFVG in return for any right, privilege, or benefit which is not usually granted by the ECFVG to other similarly situated candidates.

**If a candidate is determined to have failed to abide by the Rules of Conduct of the ECFVG or otherwise to have engaged in any form of irregular behavior, the ECFVG may terminate the candidate's participation in an examination, invalidate the results of an examination, withhold or revoke the candidate's scores or certification, bar the candidate's participation in future examinations, and/or take other appropriate adverse action. In addition, such determination shall become part of the candidate's permanent ECFVG record and the fact of such determination may be provided to third parties that receive or have received verification of ECFVG status. Such information may also be provided to other legitimately interested entities.**

Candidates also should understand that the ECFVG may or may not require a candidate to retake one or more portions of the ECFVG if presented with sufficient evidence that the security of the examination has been compromised, notwithstanding the absence of any evidence of a candidate's personal involvement in such activities.

**Test Centers and Testing Conditions**—For ECFVG candidates, the time and location for arrival at the CPE site for orientation and check in will be sent to each candidate by E-mail prior to the administration of the examination. If a candidate arrives late, he/she will not be admitted, and will have to reschedule the test date in accordance with current ECFVG policy. (For all travel-and-lodging information specific to your site, please access the letter via a link from your ECFVG Online account (CPE step).

In addition, please note the following:

- You should bring only the equipment specified for each section within the *CPE Manual of Administration*; all other equipment is provided at the CPE.
- You should wear comfortable, professional clothing.
- There are no waiting facilities for family and friends at the center; plan to meet them elsewhere after the examination ends.
- CPE site team members (wearing name tags) will direct you throughout each day of the CPE, and their instructions should be followed at all times.

There will be an on-site orientation to each section of the CPE to acquaint candidates with specific procedures and regulations.

Once candidates enter the secure testing area of the CPE site, they may not leave that area until directed to do so by a member of the CPE site team. Breaks, including a lunch break, are provided. CPE site team members will direct candidates to any on-site break and lunchrooms.

Should a candidate wish to file a concern regarding the CPE testing experience, he/she may do so at the site on the test day(s). If a candidate does not file a report at the site, he/she must notify the ECFVG office in writing within three weeks of the final day of the administration of the CPE. Concerns that are reported in this way will be investigated in accordance with the current ECFVG Complaints Procedure, available in the Policies and Procedures Manual at [www.avma.org/professionaldevelopment/education/foreign/pages/ecfv-pp-complaints.aspx](http://www.avma.org/professionaldevelopment/education/foreign/pages/ecfv-pp-complaints.aspx).

**Note: Visitors as approved by the ECFVG or NEB, may, on some occasions, be observing a CPE in progress. Other than site evaluators, they will be given no information regarding examinee identity or performance and will have no interaction with examinees.**

*Appeal Process*—ECFVG candidates determined to have violated the Rules or Conduct or otherwise engaged in irregular behavior may appeal the decision by following the current ECFVG Appeal Procedure available in the ECFVG Policies and Procedures Manual at [www.avma.org/professionaldevelopment/education/foreign/pages/ecfv-pp-appeal.aspx](http://www.avma.org/professionaldevelopment/education/foreign/pages/ecfv-pp-appeal.aspx). NEB candidates must contact the NEB office.

### **Layout of CPE**

The following seven sections make up the CPE:

- Anesthesia (AN)
- Equine Practice (EQ)
- Food Animal Practice (FAP)
- Necropsy (NEC)
- Radiology (RAD)
- Small Animal Medicine (SAM)
- Surgery (SU)

Each section of the CPE *Manual of Administration* is laid out as follows:

- Competencies. Outlines those skills on which the candidate will be assessed.
- Time. Defines maximum time limit(s).
- Set-up information. Will assist veterinary examiners and support staff in examination preparation and provide the candidate with a ‘picture’ of the testing environment. Included in the set-up information is a description of the:
  - Animal requirements
  - People requirements
  - Facilities and equipment
  - Supplies/information provided by the examiner
  - Supplies provided by the candidate
  - Special equipment or supplies specific for the section
- General Requirements of the candidate. Overview of the section/station. Describes specific skills that will be required of the candidate.
- Standard scripts for the section/station.
- Assessment sheets for the section/station.
- Appendices, if any, for the section.

### **Information Supplied to Candidates**

In all of the examination sections, the examiners will provide the candidates with an orientation to the examination room(s), supplies and equipment, including dosages of all drugs required by the CPE. The quality of the examination facilities will be consistent with those in common use in veterinary practice in the United States and/or Canada. The examiners will provide the candidates with copies of forms included in various parts of the CPE Master *Manual of Administration* that are required for completion by the candidate and also will provide paper for rough work (if required).

### **Requirements of Candidates**

The “General Requirements of the Candidate” and “Overview” paragraphs found in each section of this MOA contains paragraphs that outline behaviors and groups of clinical proficiency skills expected of each candidate. The Assessment Sheet lists the required skills outlined in the preceding paragraphs and the maximum point score allocated for each skill and provides a space for the veterinary examiner to enter the candidate's score.

### **Supplies Candidates Must Provide**

Although the incidence of rabies in domestic animals within the USA and Canada is extremely low, the ECFVG strongly encourages candidates to complete vaccination against rabies prior to taking the CPE.

Each section of the CPE *Manual of Administration* lists supplies that must be provided by the candidates for that specific section and may include:

- clean laboratory coat
- coveralls (except for necropsy; necropsy coveralls are provided by site)
- dosimeter (optional; if the candidate wishes to monitor personal levels of radiation during the examination, the candidate will provide his/her own dosimeter)
- penlight
- digital rectal thermometer (large and small animal)
- safety boots (except for necropsy; necropsy boots/shoe coverings are provided by site)

- stethoscope
- wristwatch with second hand
- surgical scrubs
- pens/pencils

### **Assessment of Candidates**

The *Manual of Administration* specifies the knowledge and technical skills (globally referred to as clinical proficiency skills) that will be asked during the examination.

Examiners will assess each candidate's knowledge and technical skills by direct observation, and in some cases, will assess their written descriptions of findings or conclusions. ECFVG testing sites may utilize video and/or audio recording for the purposes of test security and quality assurance. However, video and/or audio recording will not be used in the scoring process nor will recordings be used to reverse failing scores during the appeals process. Recordings are not precise enough to replace the level of discernment that the examiners have in real-time, face-to-face encounters.

### **Other Considerations in Candidate Assessment**

The term "efficiency" is an element in some of the assessments. Efficiency is a component of competency. Candidates are to be assessed on their timeliness and effective use of resources to complete a procedure.

A candidate who, in the judgement of the examiner, requires an unreasonable amount of time to the extent that the outcome of the procedure is jeopardized will be penalized. The penalty for this type of assistance will be reflected in the number of points assigned to the particular clinical skill. A candidate who cannot complete a skill or set of skills in the maximum time allowed will be penalized and may receive no points for a given station or section.

In several stations candidates are required to do multiple tasks. In all stations, candidates must manage their time to ensure that they complete all tasks in the time allotted for the station. Examiners will not be responsible for prompting candidates through their tasks or for reminding them of their impending tasks. Candidates will be fully responsible for their own completion of all tasks required to be demonstrated.

If a candidate compromises his/her personal safety or the safety of personnel while working around animals during the course of the CPE (e.g., too close to the rear legs of a horse), the examiner may terminate the procedure. Similarly, the examiner will assist an animal if a candidate, by an act of omission or commission, puts an animal into an inhumane or life-threatening situation and the situation is not corrected by the candidate. Depending upon the severity of the action, the examiner may deduct points from that particular skill or the candidate may be dismissed with a fatal flaw for the section.

### **Fatal Flaw**

Throughout the MOA, the term 'fatal flaw' is used to denote an action attempted, performed, or specified by a candidate that would have a high likelihood of causing serious injury to a patient, to the candidate, and/or to associated personnel. Note that 'fatal flaw' is an assessment issued by the examiner that terminates the examination immediately and does not necessarily imply that the action would be fatal to the patient.

Correspondingly, a 'fatal flaw' assessment is not restricted to use only in live animal situations but may also be awarded in either simulated patient encounters or written exam elements. Numerous examples of fatal flaws are provided throughout different sections of the MOA but these lists are not comprehensive and examiners may award 'fatal flaws' for any action not specified in the MOA that, in their discretion, would have a high likelihood of serious injury to the patient, candidate, or personnel.

### Passing Standard and Score Reporting

Most sections of the examination use a point system as outlined in the scoring rubrics in each section of the Manual of Administration. Anesthesia & Surgery sections use a Pass/Fail system. A score of 60 points or greater, or a “Pass”, is required in each of the 7 sections of the CPE in order to pass the examination.

Candidates passing all sections of the exam will be awarded their ECFVG certificate **[or, in Canada, will be allowed to proceed to the next step leading to the Certificate of Qualification]**, provided all other documentation is complete, as determined by the ECFVG **[or NEB]** office.

Results (pass or fail only) from examinations administered at ECFVG-approved CPE sites will be reported by the ECFVG office via E-mail and through ECFVG Online. Scores will be released no more than twenty (20) business days following the final day of any given CPE administration. Scores **CANNOT** be released via fax or telephone. To ensure timeliness in delivery of score reports, it is essential that candidates update their E-mail address immediately via ECFVG Online.

Scores from examinations administered at Canadian NEB-approved sites will be reported by the NEB in accordance with NEB protocols.

### Candidates Not Passing All Sections

A candidate with a “fail” in four or more sections of the examination must retake the entire examination. A candidate with a “fail” in one, two, or three sections is allowed two additional opportunities to retake and successfully pass the failed sections as long as the candidate applies for retakes within 6 months of each failure and accepts one of the first available retakes offered. Failure to successfully pass the retake sections within 2 retake attempts or failure to accept one of the first available retakes will necessitate the candidate retaking the entire CPE. **PLEASE NOTE:** only a total of two retake attempts are allowed for each failed section, regardless whether those attempts are taken at an ECFVG- or NEB-approved CPE site. The ECFVG and NEB offices will communicate with each other regarding candidates registered in both programs.

### Use of Reference Material

The CPE is an examination that measures a candidate's proficiency in performing veterinary clinical skills at the entry level. The expectation is that each candidate will demonstrate the required skill **without** reference material unless reference material is required for a specific portion of the examination. In this case, the reference material is listed in the section Supplies/Information Provided By The Examiner and will be supplied by the examiner.

### Extended score reports to candidates

An unsuccessful candidate may request an extended but standardized score report of failed section(s) from the office of administration (i.e., ECFVG or NEB offices). The report will identify major areas in which the candidate has demonstrated a deficit of knowledge and/or technical proficiency. As such, the purpose of the report is to aid that candidate in preparation for a career in veterinary medicine rather than helping the candidate pass a limited number of skills on the CPE. Requests for extended score reports must be received within two weeks (14 days) of distribution of the candidate's CPE score report. Candidates intending to file an appeal of a failing score must request an extended score report within 14 days of the score notification and before initiating the ECFVG Appeal Process. ECFVG candidates must request the extended score report via E-mail to ECFVG@avma.org. The extended score report will then be returned to the candidate via E-mail within 10-15 business days of receipt of the request. **Candidates may only request extended score reports from the ECFVG office (or the NEB office for CPEs administered in Canada) and are**



**prohibited from asking examiners for feedback or for more details of their failure during or after completion of the CPE.**

### **Common Diagnoses/Conditions**

The CPE is a test of “entry-level skills.” Therefore, cases/conditions selected for inclusion on the examination should be common conditions with which the new graduate of an AVMA-accredited school should be familiar. An example list of common diagnoses is maintained in the CPE Candidate Bulletin at [www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx](http://www.avma.org/professionaldevelopment/education/foreign/pages/ecfvg-cpe-bulletin.aspx). Candidates and examiners must realize that this list is not exhaustive and that there is no requirement that the CPE be limited to the diagnoses and conditions on this list.

### **References for the CPE**

The knowledge level expected to receive a passing score on the CPE is that of an entry-level U.S. or Canadian veterinarian (i.e., new graduate of an AVMA/COE-accredited veterinary school). Reference lists for curricula at accredited veterinary schools are extensive. The following list represents a relevant subset that appropriately covers the content of the CPE. While experience gained from reading material is helpful in preparing for the CPE, the candidate must not consider these to be a substitute for hands-on clinical instruction and experience.

1. Ballweber, LR. Veterinary Parasitology, (2001), Boston: Butterworth-Heinemann.
2. Baxter, GM. Adams & Stashak's Lameness in Horses, 6<sup>th</sup> ed. (2011), Ames, IA: Wiley-Blackwell.
3. Bertone, JJ. Equine Clinical Pharmacology, (2004), Philadelphia: Saunders (Elsevier).
4. Birchard, SJ. Saunders Manual of Small Animal Practice, 3<sup>rd</sup> ed. (2006), St Louis: Elsevier.
5. Bonagura, JD. Kirk's Current Veterinary Therapy, XIV, 14<sup>th</sup> ed. (2009), St Louis: Saunders (Elsevier).
6. Boothe, DM. Small Animal Clinical Pharmacology & Therapeutics, 2<sup>nd</sup> ed. (2012), St Louis: Elsevier).
7. Butler, JA. Clinical Radiology of the Horse, 3<sup>rd</sup> ed. (2008), Ames, IA: Wiley-Blackwell.
8. Castro, AE. Veterinary Diagnostic Virology: A Practitioner's Guide, (1992), St. Louis: Mosby.
9. De Lahunta, A. Applied Veterinary Anatomy, (1986), Philadelphia: Saunders.
10. Dennis, R. Handbook of Small Animal Radiology and Ultrasound: Techniques and Differential Diagnosis, 2<sup>nd</sup> ed. (2010), St Louis: Churchill-Livingstone (Elsevier).
11. Dyce, KM. Textbook of Veterinary Anatomy, 4<sup>th</sup> ed. (2010), St Louis: Elsevier.
12. Ettinger, SJ. Textbook of Veterinary Internal Medicine, 7<sup>th</sup> ed. (2010), Philadelphia: Saunders (Elsevier).
13. Evans, HE. Miller's Anatomy of the Dog, 4<sup>th</sup> ed. (2013), St Louis: Elsevier.
14. Farrow, CS. Veterinary Diagnostic Imaging – The Dog and Cat, (2003), St. Louis: Mosby.
15. Fossum, TW. Small Animal Surgery, 4<sup>th</sup> ed. (2012), St Louis: Mosby (Elsevier).
16. Frandson, RD. Anatomy and Physiology of Farm Animals, 7<sup>th</sup> ed. (2009), Ames, IA: Wiley-Blackwell.
17. Greene, CE. Infectious Diseases of the Dog and Cat, 4<sup>th</sup> ed. (2012), St Louis: Elsevier.
18. Jones, TC. Veterinary Pathology, 6<sup>th</sup> ed. (2010), Ames, IA: Blackwell.
19. Kahn, CM. Merck Veterinary Manual, 10<sup>th</sup> ed. (2010), Whitehouse Station, NJ: Merck.
20. Kealy, JK. Diagnostic Radiology and Ultrasonography of the Dog and Cat, 5<sup>th</sup> ed. (2011), St Louis: Elsevier.

21. Knottenbelt, DC. Color Atlas of Diseases and Disorders of the Horse, (1994), St Louis: Mosby.
22. Kumar, V. Robbins and Cotran Pathological Basis of Disease, 8<sup>th</sup> ed. (2010), Philadelphia: Saunders (Elsevier).
23. Latimer, KS. Duncan & Prasse's Veterinary Laboratory Medicine – Clinical Pathology, 5<sup>th</sup> ed. (2011), Ames, IA: Wiley-Blackwell.
24. Lavin, LM. Radiography in Veterinary Technology, 3<sup>rd</sup> ed. (2003), Philadelphia: Saunders (Elsevier).
25. Maxie, MG. Jubb, Kennedy, & Palmer's Pathology of Domestic Animals, 5<sup>th</sup> ed. (2007), St Louis: Elsevier.
26. Muir, WW, III. Handbook of Veterinary Anesthesia, 5<sup>th</sup> ed. (2013), St Louis: Elsevier.
27. Nelson, RW. Small Animal Internal Medicine, 4<sup>th</sup> ed. (2009), St Louis: Mosby (Elsevier).
28. Osborne, CA. Urinalysis: A Clinical Guide to Compassionate Patient Care, (1999), Shawnee Mission, KS: Bayer.
29. Plumb, DC. Plumb's Veterinary Drug Handbook, 7<sup>th</sup> ed. (2011), Ames, IA: Wiley-Blackwell.
30. Pugh, DG. Sheep and Goat Medicine, 2<sup>nd</sup> ed. (2012), Maryland Heights, MO: Elsevier.
31. Radostits, OM. Veterinary Medicine: A textbook of the diseases of cattle, horses, sheep, pigs and goats, 10<sup>th</sup> ed. (2007), St. Louis: Saunders (Elsevier).
32. Reed, SM. Equine Internal Medicine, 3<sup>rd</sup> ed. (2010), St Louis: Saunders (Elsevier).
33. Riviere, JE. Veterinary Pharmacology & Therapeutics, 9<sup>th</sup> ed. (2001), Ames, IA: Wiley-Blackwell.
34. Rollin B, Wilson, JF, and Jarbe JL. Law and Ethics of the Veterinary Profession, (2002), Priority Press Ltd
35. Ross, MW. Diagnosis and Management of Lameness in the Horse, 2<sup>nd</sup> ed. (2011), St Louis: Elsevier.
36. Slatter, D. Textbook of Small Animal Surgery, 3<sup>rd</sup> ed. (2002), St Louis: Elsevier.
37. Smith, BP. Large Animal Internal Medicine, 4<sup>th</sup> ed. (2009), St Louis: Elsevier.
38. Spiers, VC. Clinical Examination of Horses, (1997), Philadelphia: Saunders.
39. Stockham, SL. Fundamentals of Veterinary Clinical Pathology, 2<sup>nd</sup> ed. (2008), Ames, IA: Blackwell.
40. Thrall, DE. Textbook of Veterinary Diagnostic Radiology, 6<sup>th</sup> ed. (2013), St Louis: Elsevier.
41. Thrall, MA. Veterinary Hematology and Clinical Chemistry, 2<sup>nd</sup> ed. (2012), Ames, IA: Wiley-Blackwell.
42. Timoney, JF. Hagan and Bruner's Microbiology and Infectious Diseases of Domestic Animals, 8<sup>th</sup> ed. (1988), Ithaca, NY: Comstock.
43. Tranquilli, WJ. Lumb and Jones' Veterinary Anesthesia and Analgesia, 4<sup>th</sup> ed. (2007), Ames, IA: Blackwell.
44. Willard, MD. Small Animal Clinical Diagnosis by Laboratory Methods, 5<sup>th</sup> ed. (2012), St Louis: Elsevier.
45. Wingfield, WE. Veterinary ICU Book, (2002), Jackson Hole, WY: Teton NewMedia.
46. Youngquist, RS. Current Therapy in Large Animal Theriogenology, 2<sup>nd</sup> ed. (2007), St Louis: Elsevier.
47. Zachary, JF. Pathologic Basis of Veterinary Disease, 5<sup>th</sup> ed. (2012), St Louis: Elsevier.

**Standard Script for General Candidate Orientation to the CPE and the Examination Site**

The examiner should read the following script (in quotes) to all candidates as a general orientation to the CPE and the site. The script may be modified to meet specific facility or equipment restrictions at each site.

“Welcome to the Clinical Proficiency Examination. My name is **[insert name]** and I coordinate the exam here at **[insert name]**. On behalf of all of the examiners here, I would like to wish you all the best of luck over the next 3 days. We all recognize that this can be a stressful process but please relax and do your best. You will not be asked anything that is not expected of a newly graduated veterinarian, and hundreds of candidates before you have successfully completed the CPE and gone on to rewarding careers in veterinary medicine.

During the next three days you will participate in a comprehensive practical examination of your clinical veterinary skills.

A comprehensive schedule of the examination is included in your information packet. If you have any questions related to the schedule please ask them now, or at the end of this orientation.

If you have not already done so, please sign the registration sheet.

Let me talk a few minutes about facilities. **[Each site will have to specifically inform candidates about break rooms, library access, available rest rooms, and access to food.]**

The **[insert name or number of room]** has been reserved as the "home base" for candidates participating in the Clinical Proficiency Examination. Feel free to work out of this room, leave materials in this room (at your own risk) and convene in this room prior to sections of the examination. Be sure that you assemble no later than the time listed on your schedule for each section of the exam. **[Each site may have to insert specific information related to candidates assembling at other locations during the exam].**

Be sure you wear your identification badge at all times in the examination and provide your number and/or name on all papers submitted during the examination. Failure to identify your work could disqualify the work from scoring.

Within fifteen (15) working days following the last day of this examination, we will submit a report to the ECFVG office at the AVMA **[Canadian sites, use NEB office]**. The ECFVG **[Canadian sites, use NEB]**, will review the scores and notify each of you by E-mail and through ECFVG Online **[Canadian sites, use by mail or E-mail]** of your final score on the CPE. Thus, it may take up to four weeks from the end of the examination until you receive your report from the ECFVG **[Canadian sites, use NEB]**.

Discussing components of your exam with other candidates while the exam is in progress is not allowed. To avoid any appearance of impropriety, all conversations must be conducted in English language while at the testing site. [Montreal test site may use French/English]. Remember that you already earlier signed an honor statement—an oath—that you will not discuss the exam with other candidates. The ECFVG **[Canadian sites, use NEB]** has the right to dismiss any candidate who violates the security of this exam during the administration of the exam. No cell phones, PDAs, or other electronic assisting

devices may be used during the exam. If you have any questions about what you may take with you into the examination, please check with me or one of the section coordinators.

If there is a reason to believe that the integrity of the examination process is jeopardized, we will immediately notify the ECFVG [**Canadian sites, use NEB**] office. The ECFVG [**Canadian sites, use NEB**] may invalidate all or any part of a CPE administration. If information indicates that continued testing would jeopardize the security of examination materials or the integrity of scores, the ECFVG reserves the right to suspend or cancel any CPE administration.

By applying to take the CPE, you agree to the following Rules of Conduct:

1. You are the person named on your CPE application.
2. You will place in a locker or cubicle all personal belongings, including cellular telephones, watches with computer communication and/or memory capability, pagers, personal digital assistants (PDAs), formulas, study materials, notes, papers, and your purse or wallet, before you enter the secure testing areas. Lockers are available for your use and are located [**insert location of lockers for Candidates**]
3. You will not use a telephone at any time while you are in the secure areas.
4. You will not give, receive, or obtain any form of unauthorized assistance during the testing session, including any breaks.
5. You will not have in your possession any formulas, study materials, notes, papers, or electronic devices of any kind unless you are out of the secure testing areas of the CPE site.
6. You will not remove materials in any form (written, printed, recorded, or any other type) from the secure testing area unless instructed to do so by the examiners.
7. You understand and acknowledge that all examination materials remain the property of the CPE site and ECFVG, and you will maintain the confidentiality of the case content for all seven sections of the CPE.
8. You will not reproduce or attempt to reproduce examination materials through memorization or any other means, nor will you provide information relating to examination content that may give or attempt to give unfair advantage to individuals who may be taking the examination, including, without limitation, by posting information regarding examination content on the Internet.
9. You will conduct yourself professionally with examiners and staff before, during, and after completion of your exam. If you are dismissed from any exam you must leave the testing area promptly. Otherwise, the test site may request security to escort you from the testing area. This may result in your inability to participate in other CPE section exams.

Unless specifically authorized, candidates may not bring personal belongings into secure testing areas of the CPE site. Failure to follow these rules shall constitute a violation of the Rules of Conduct for the administration of the CPE and may lead to adverse action regarding a candidate's examination.

For the CPE, candidates should understand that the entire testing session over the 3-day testing period, including all breaks, is considered a closed and secure testing session, and that the entire CPE site, including any on-site lunch room, break rooms, and restrooms, is a secure testing area. Therefore, the rules regarding unauthorized possession during the CPE extend to lunch, if lunch is provided on site, and all breaks.

All of the CPE site team members, including site and section coordinators, examiners, veterinary technicians, and technical assistants will be monitoring all sections of the CPE. If a CPE site team member observes a candidate violating the Rules of Conduct or engaging in other forms of irregular

behavior during a CPE, that person will report such incidents to the ECFVG [*Canadian sites, use NEB*]. Each report shall be fully investigated.

As a CPE site, we have an obligation to administer the examination as described in the Manual of Administration. If at any point you believe that an examiner has asked you to do something that is not in the MOA, you should perform the task to the best of your ability. Afterward, inform either myself [*or insert names and introduce any appropriate staff*] of the issue. You should perform the task to the best of your ability because it is possible that you misread or misinterpreted the MOA. You should let us know so we can investigate your concerns and make a determination. It is certainly possible for an examiner to misread or misinterpret something in the MOA and in that in case we will not allow that to impact your scores on the CPE.

As I said at the beginning, we recognize that this is a stressful process. The examiners will do everything they can to minimize this stress. Do not allow a simple mistake to diminish your performance on the rest of the exam. No one has ever made a perfect score on this examination; everyone makes mistakes. When you make a mistake, put it behind you and continue to perform at your best throughout the remainder of the exam.

Good luck, do your best!

Any questions?"

## ANESTHESIA

### Competencies

The Anesthesia Section consists of two parts. Part 1 must be administered the day before Part 2.

- Part 1
  - Select appropriate drugs and calculate correct doses (assessed within a stand-alone Drug Protocol and Dose Calculation station or incorporated into another section)
- Part 2
  - Perform a preanesthetic examination to determine a patient's anesthetic risk status
  - Select, assemble, and use appropriate anesthetic equipment and accessories.
  - Premedicate, induce and maintain general anesthesia in a canine patient.
  - Monitor and maintain a patient under general anesthesia
  - Discuss recovery of the patient from anesthesia, to include postoperative pain management.

### Time

- The candidate will be given forty-five (45) minutes for the Drug Protocol and Dose Calculation Station.
- The candidate will be given one hundred (100) minutes (1 hour and 40 minutes) from the start of the preoperative examination to having the patient anesthetized and ready for surgical preparation. This means that all tasks outlined in the MOA are complete and the dog's airway is secure (intubated with endotracheal tube secured appropriately); the dog is connected to the anesthetic machine with inhalant anesthetic started at an appropriate level; a functional/patent IV catheter is in place and appropriately secured and IV fluids are started; the dog is at a suitable plane of anesthesia for surgical preparation to begin; and the candidate has begun initial monitoring of the patient. Required monitoring equipment can be placed after the 100-minute limit. However, the candidate must still monitor the patient appropriately (assessment of cardiovascular and respiratory status and depth of anesthesia) during this peri-induction period. Candidates who exceed the 100 minute maximum for these activities/skills will be immediately dismissed from, and receive a failing score for, this section of the CPE.
- Candidates completing all necessary tasks in less than 100 minutes should tell the examiner that they have completed all tasks and are ready for the surgeon
- Once the surgical procedure begins, the Anesthesia candidate will continue to be assessed on the maintenance phase of anesthesia and recovery of the patient. The Anesthesia assessment will end at the conclusion of the ovariohysterectomy or immediately thereafter.

### Set-up Information

1. Animal Requirements—The anesthesia candidate will utilize the animal designated for the surgery candidate (One female dog per candidate, 6-28kg (within BCS of 2-4 out of 5)).
2. People Requirements (minimum)
  - a. For the Drug Protocol and Dose Calculation station:
    - i. One proctor
  - b. For the rest of the Anesthesia Section:
    - i. One veterinary examiner per 3 candidates
    - ii. One technical assistant or veterinary technician per 2 candidates

3. Facilities and Equipment—Facilities and Equipment for Anesthesia and Surgery are the same.
  - a. A room/area for the Drug Protocol and Dose Calculation station to allow candidates to develop drug protocols and calculate doses.
  - b. Rooms (or areas) equipped for the preparation of animals for surgery.
  - c. Rooms (or areas) equipped to carry out the required surgical procedure.
  - d. Timing device visible from each station to track examination time. Whenever possible, timers will be of the “count-down” variety to allow candidates and examiners alike to clearly see time remaining in station or section.
4. Supplies/Equipment/Accessories Provided By The Examiner
  - a. Standard anesthetic machines (each machine to have a precision halothane, isoflurane, or sevoflurane vaporizer which is temperature and flow compensated and its own oxygen supply; availability of specific vaporizer dependent on site of examination administration).
  - b. Rebreathing and non-rebreathing systems.
  - c. Standard anesthetic and monitoring accessories such as esophageal stethoscope, Doppler or oscillometric blood pressure monitoring equipment (either one or the other will be provided, dependent on CPE site), thermometer and/or electronic monitoring equipment, endotracheal tube, laryngoscope (different blade sizes), intravenous catheters, IV fluids, pulse oximeter, capnograph.
  - d. Scratch paper and nonprogrammable basic calculator for drug dose calculations.
5. Supplies Provided By The Candidate
  - a. Stethoscope, clean laboratory coat, surgical scrubs
6. Anesthetic Drugs  
 The candidate will be asked to choose 1 or more of the following anesthetic drugs for use during the procedure. Examiners will provide dosages and concentrations of the following drugs to candidates for use on site in specific dose and volume calculations. Specific drugs available for use may vary dependent on the CPE site, but will come from the following list:

- |   |                     |
|---|---------------------|
| • Acepromazine  | • Glycopyrrolate    |
| • Alfaxalone  | • Hydromorphone     |
| • Atipamezole (equal volume to the volume of dexmedetomidine) | • Isoflurane        |
| • Atropine  | • Ketamine/diazepam |
| • Buprenorphine   | • Meloxicam         |
| • Butorphanol   | • Meperidine        |
| • Carprofen   | • Midazolam         |
| • Diazepam  | • Morphine          |
| • Dexmedetomidine   | • Propofol          |
|   | • Sevoflurane       |

### General Requirements of the Candidate

The Anesthesia and Surgery Sections of the CPE will be administered at the same time. The anesthesia candidate will anesthetize, stabilize, and monitor the animal while the surgery candidate performs the

surgical procedure. If a surgery candidate is not available, the examiner will provide someone to perform the surgery so that the anesthesia candidate exam may be conducted. Also, if in the event a surgery candidate is dismissed prior to the end of the surgery, the examiner will provide someone to finish the surgical procedure so that the anesthesia candidate exam may continue.

Candidates are expected to handle all animals in a humane and safe manner. If, in the opinion of the examiner, the candidate does not handle the animal humanely or handles the animal in a manner that is unsafe to him/her or other personnel the examiner may assess penalties ranging from a reduction in score to termination of the exam and dismissal of the candidate.

The Anesthesia Section is scored as Pass or Fail. Candidates receiving a **FAILING** evaluation for any one (1) **MAJOR** skill or any combination of four (4) **MINOR** skills as noted on the Anesthetic Skills Assessment Sheet (AN01) may be allowed to complete the examination but will receive a **FAILURE** for the Anesthesia Section. Candidates committing a fatal flaw (see Appendix 1 in this section of the MOA) as determined by the examiner will be immediately dismissed from, and will receive a failing score for, this section of the CPE. Candidates must also note that there are many factors that go into the pass/fail decision in this section. Successful entry-level performance of the skills assessed in the Anesthesia Section involves much more than having the patient survive the anesthesia—in other words, more than getting through the procedure without being dismissed for committing a fatal flaw.

The examiner will assist an animal and terminate the Anesthesia Section if a candidate by an act of omission or commission puts an animal into an inhumane or life threatening situation and the situation is not corrected by the candidate (fatal flaws; please see Appendix 1 in the Anesthesia Section of the MOA). Examples of life threatening situations include but are not limited to esophageal intubations that are unrecognized and uncorrected by the candidate, failure to open the pop-off valve, and failure to adjust the depth of anesthesia to an appropriate level. Such errors may be considered fatal flaws. In the case of a fatal flaw, the examiner will document and verify the error, correct it, and ask the candidate to leave the Section immediately. The candidate will receive a failing score for the Anesthesia section regardless of the score accumulated at the point of termination.

### Overview of the Anesthesia Section

1. Anesthetic drug protocol selection and drug dose calculation (45 minute time limit): The Drug Protocol and Dose Calculation station must be completed the day before administering anesthesia to patient. At the station, the candidate will be given a list of available drugs, the concentrations of the drugs that are available, and recommended dose ranges. Based upon the weight and estimated age of the canine patient, and assuming an ASA status of 1, the candidate will **design an anesthetic protocol** (preanesthetic drugs, anesthesia induction, anesthesia maintenance, and pain management); **calculate the volume** of each drug selected based upon the drug concentration provided; and **enter the results** on the Anesthesia Record (Appendix 3). The candidate will also **record his/her reasons** for selecting the specific drugs used on the Anesthesia Record.

**Please note:** candidates must complete this task within a maximum time period of 45 minutes. Other than fulfilling the requirement that the station be administered the day before, each CPE site can determine when to administer the Drug Protocol and Dose Calculation station so that it best fits their site's overall schedule. For example, the Drug Protocol and Dose Calculation station may be administered as a stand-alone station or incorporated into another section (eg, Small Animal Medicine) as a station through which each candidate cycles.



2. Preanesthetic examination and premedication; selection and set-up of anesthetic equipment; induction, intubation, and initiation of Inhalant Anesthesia; and initial patient monitoring (100 minute time limit; time begins after all instructions have been read and when candidates receive their dog):

1. *Preanesthetic examination and premedication*—The candidate will **perform** a preoperative physical examination on a female canine patient scheduled for ovariohysterectomy and will **record the results** of the preoperative examination. This includes requesting appropriate laboratory data and recording the results on the Anesthesia Record. The candidate should request appropriate minimum laboratory tests for the patient and procedure; **interpret and record** results of those laboratory tests (which will be provided by the examiner); and **assign** an ASA preanesthetic physical status to the patient (see Appendix 2 of the Anesthesia Section). The candidate will also **premedicate** the dog, using the drug protocol that he/she indicated earlier. All information is to be recorded on the Anesthesia Record (Appendix 3). Please note: doses/volumes of all anesthetic drugs were calculated initially, assuming an ASA status of 1. However, if the candidate determines from his/her preanesthetic physical exam that the actual ASA status is different, then the candidate may modify the actual drug doses to be administered accordingly.
2. *Selection and set-up of anesthetic equipment*—Given the anesthetic supplies and equipment as listed, the candidate will **determine and record** fresh gas flow rates for the patient; **make** appropriate selections of other accessories (e.g., endotracheal tube) as they relate to the patient; **choose and attach appropriate breathing system to machine**, systematically **check** the assembly and operation of the anesthetic equipment; and verbally **explain or describe** the assembly and operation of the anesthetic equipment to the examiner.
3. *Induction, intubation, and initiation of inhalant anesthesia*—The candidate will **place an IV catheter**, ensure it is patent, and secure it appropriately and **administer induction agent**, using the drug protocol that he/she indicated earlier. Please note: doses/volumes were calculated initially, assuming an ASA status of 1. However, if the candidate determines from his/her preanesthetic physical exam that the actual ASA status is different, then the candidate may modify the actual drug doses to be administered accordingly. The candidate will **intubate** the patient, assess that the tube is placed correctly, inflate the cuff, secure the endotracheal tube, appropriately inflate the cuff, and connect the endotracheal tube to the anesthetic machine appropriately within 5 minutes of initial injection of the induction agent. Failure to complete all those tasks within the 5-minute limit will result in immediate dismissal of the candidate and a failing score for the Anesthesia Section. The candidate will **connect the patient to the anesthetic machine**, with inhalant anesthetic and fresh gas flow rates set at appropriate levels to bring the patient to a surgical plane of anesthesia.
4. *Initial patient monitoring*—The candidate will **begin initial monitoring of the patient within 3 minutes of intubation** (i.e., assessment of cardiovascular and respiratory status and depth of anesthesia), **record findings** on the Anesthesia Record, and **administer IV fluids** (appropriate type and rate).

Tasks 1-4 above must be completed within 100 minutes. To avoid unnecessary prolongation of anesthesia of the patient, the candidate **SHOULD** indicate he/she is ready for the surgery candidate to begin patient preparation if he/she has completed tasks 1-4 above in less than 100 minutes. **PLEASE NOTE:** when an anesthesia candidate calls for the surgery candidate, this is an indication he/she has

completed tasks 1-4 above. Failure to complete tasks 1-4 above in the 100 minute time limit will result in immediate dismissal of the anesthesia candidate and a failing score for the Anesthesia Section.

5. *Maintenance (2.5 hour time limit, with actual time dependent on surgery candidate)*—As soon as possible after calling for the surgery candidate, the candidate will apply the remaining monitoring equipment, which includes placement of an esophageal stethoscope, a blood pressure monitor, pulse oximeter, thermometer, and capnograph, to the patient; maintain and monitor the animal in a surgical plane of anesthesia during the ovariohysterectomy; record findings on the anesthetic record in a timely manner (e.g., every 5-10 minutes); be able to explain to the examiner what parameters he/she is monitoring and how he/she is monitoring those parameters; interpret his/her assessment of patient parameters and monitoring equipment readouts for that specific patient; correct any abnormalities as assessed during monitoring; be able to explain why corrections were or were not made; and record necessary information on the Anesthesia Record provided in Appendix 3 of the Anesthesia Section. Please note results, interventions, and any other comments must be recorded as soon as assessments are made. Candidate score will be negatively impacted if she/he does not complete the Anesthesia Record in real time.

**If a candidate believes that a piece of equipment is malfunctioning, the candidate must immediately bring this concern to the examiner's attention. The examiner will determine if the concern is valid and, if so, take appropriate remedial action. If a candidate believes that a piece of equipment was malfunctioning, that the issue was not appropriately corrected after alerting the examiner, and the malfunctioning equipment had the potential to affect the outcome of the candidate's assessment, then the candidate must document the issue immediately upon the conclusion or termination of the exam using the 'Anesthesia Equipment Incident Report' in Appendix 4. Failure to file an Anesthesia Equipment Incident Report may result in the denial of an appeal of the examination result based upon a claim of faulty equipment.**

### **Standard Script for Drug Protocol and Dose Calculations Station**

Prior to beginning the Drug Protocol and Dose Calculations station, the examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site.

"You will be anesthetizing a dog for a routine ovariohysterectomy. You will have a list of available drugs, their concentration and their recommended dose range. You will also have your Anesthesia Record with details of the dog assigned to you, including the body weight and an estimated age.

Assuming an ASA status of 1, you will have a maximum time of 45 minutes to decide on your anesthetic protocol including your plan for preanesthetic drugs, anesthesia induction, anesthesia maintenance, and pain management. Calculate the final dose and final volume for all the selected drugs, and indicate whether you require the drugs to be mixed. Enter the results in the appropriate places in the Anesthesia Record.

You will also need to describe your reasons for choosing the drugs for your dog. There is space for this on the Anesthesia Record and on the back of the sheet. Extra paper can be provided for

calculations. Please put your candidate ID/name on the paper and all pages of the Anesthesia Record, and return completed sheets to the examiner at the end of the 45 minutes. The Anesthesia Section Coordinator or Examiner will grade your drug choices, calculations and comments. All drugs will be prepared by the Anesthesia Examiners or Veterinary Technicians in accordance with your calculations and instructions. You will have a maximum of 45 minutes to complete this task.

### Standard Script for Anesthesia Section—Peanesthetic Exam to Maintenance Phase

“You will be anesthetizing a dog for an elective ovariohysterectomy performed by another candidate or surgeon. Please assume the dog belongs to a client and the dog will be going home after a sufficient recovery period within your hospital.

A trained technician will assist you, but you must communicate with the technician and request assistance as needed. The examiner **[I]** will be evaluating your performance and will be recording both positive and negative behaviors. Please do not let the examiner’s **[my]** writing affect your performance. Neither the examiner **[I]** nor the technicians can offer feedback during or after the examination. The examiner **[I]** may stop the examination and issue a fatal flaw if you commit an error that places the animal in a potentially life-threatening situation, or yourself or other personnel in danger.

The examiner has **[I have]** returned your Anesthesia Record. After we start the examination, if you wish, you can recheck your drug calculations and the drugs provided to you and notify the examiner **[me]** of any changes you would like to make. Please write all other findings and other data on the Anesthesia Record provided. Ensure your name/candidate ID is written on all pages and sign the form on the final page when you have completed the examination.

Once your dog is brought to you, you will have a maximum of 100 minutes to have the dog ready for the surgeon. The list of tasks to complete within the 100 minute time limit is in the Manual of Administration. The task list includes:

1. Perform a preanesthetic physical examination of the dog;
2. Record examination findings on the Anesthesia Record;
3. Request blood work;
4. Assign a pre-anesthetic physical status based on your findings;
5. Administer premedication drugs in accordance with the plans you made previously;
6. Assemble the anesthetic machine and breathing system, and check that it is working properly;
7. Assemble all the equipment needed to place an IV catheter and intubate the trachea;
8. Assemble monitoring equipment;
9. Place the IV catheter;
10. Induce anesthesia in the dog and begin inhalant anesthesia;
11. Start IV fluids;
12. Begin monitoring anesthesia and record your findings on the Anesthesia Record;
13. Finally, call for the surgery candidate.

If you do not complete all of these tasks within 100 minutes, you will be dismissed from the Anesthesia Section and receive a failing score. Please note that although you must begin

monitoring the dog's heart and respiratory rate and depth of anesthesia during this 100 minute time limit, required monitoring equipment can be placed after the surgery candidate has initiated patient preparation.

The examiner **[I]** will now show you where necessary supplies are available **[show to candidates]**. If the specific item you request is not available, you will be asked to make another choice from the equipment and supplies we have available here.

The 100 minute time limit will start when the dog is brought to you. Start with the preanesthetic physical examination on your dog and record your findings. The preanesthetic examination should include, at minimum, an assessment of temperature, pulse quality and cardiovascular status, and auscultation of the heart and respiratory systems. The patient's weight will be provided. You can request the minimum laboratory tests you deem appropriate for your dog and this procedure. The examiner **[I]** will provide you the results of those tests that were completed. Based on the physical examination and laboratory results, you should assign an ASA preanesthetic physical status to the patient and record all the data on the Anesthesia Record.

You are not obliged to use the drug plan you developed yesterday—you can still make changes based on the ASA status that you determine today during your preanesthetic assessment. Please notify the examiner **[me]** of any changes you would like to make. If you think there has been a mistake with drug calculations and the drugs given to you, please notify the examiner **[me]**.

Once you have pre-medicated your dog, you may leave your dog with the technician or place it in a kennel, and start to set up your station while the pre-medication drugs take effect. Select appropriate catheters, and intubation, fluid administration, and monitoring equipment, and anesthetic breathing systems. Assemble the anesthetic machine and breathing system. Check that the machine and breathing system are working properly. Please call an examiner over when you are ready to show the anesthetic machine to an examiner **[me]** and describe the function of the parts to the examiner **[me]**. When you are ready to induce anesthesia, you can **[request or go get]** your pre-medicated dog, and insert an IV catheter and secure it in place with help from your assistant. Notify the examiner **[me]** when you are ready to administer the induction drug and need a 5-minute timer to be set up. The 5-minute time limit will start once the anesthetic induction drug is given. Within this time limit, you must administer an appropriate amount of induction drug to allow endotracheal intubation, secure and check the endotracheal tube, inflate the cuff, and connect the endotracheal tube to the anesthetic breathing machine. Failure to complete all these tasks within the 5-minute limit will result in dismissal from the Anesthesia Section and a failing score.

Within 3 minutes of intubation, you must begin monitoring the cardiac and respiratory status of your patient. Failure to begin monitoring within 3 minutes of intubation will result in a skill failure. Following intubation, you must appropriately set the inhalant anesthetic and fresh gas flow rates; start IV fluids at an appropriate rate; and begin monitoring your patient. Remember that you will need to include recording your findings on the Anesthesia Record. Once you have done all of these tasks, you should notify the **[examiner, technician or surgery candidate/examinee]** that the surgery candidate may begin the preparation for surgery and this will signify the end of the 100 minute time limit. Again, failure to complete these tasks prior to calling for the surgeon and within the 100 minute time limit will result in a failing grade and your dismissal from this section. It is up to you to determine how best to proceed to ensure all tasks outlined in your copy of the Manual of Administration are completed correctly and

efficiently. All required monitoring equipment (blood pressure monitor, pulse oximeter, thermometer, and capnograph) should be placed as soon as possible. You will also need to place an esophageal stethoscope prior to transport of the patient to the operating room. Ensure your dog is maintained at an appropriate plane of anesthesia and is not physically compromised.

We have made every effort to make sure that all of the equipment is working correctly and accurately. Please notify the examiner if you believe something is not functioning correctly so that the examiner can fix the problem. If you believe that a piece of equipment did not work correctly and adversely impacted your assessment, you must report the problem by filling out the Anesthesia equipment incident report at the end of your exam. Once all monitoring equipment is placed, you will be required to monitor your dog throughout the surgical procedure, using this equipment as well as assessing physical parameters to ensure your dog is maintained at an appropriate plane of anesthesia. You must record your findings in a timely manner on your Anesthesia Record. Failure to do so will result in a scoring penalty. You will need to adjust the plane of anesthesia as necessary and correct any physical abnormalities detected in your patient (e.g., low blood pressure, low respiratory rate, low body temperature).

You will be completed with this section of the CPE when the last skin suture has been placed or the surgery candidate's allotted time has expired.

Remember that you must complete all necessary skills as spelled out in the Manual of Administration from the preanesthetic examination to initiation of inhalant anesthesia and patient monitoring within 100 minutes. A hard copy of this standard script will be located [**sites to indicate where**] for you to reference as needed during this section of the exam. A clock is [**and timers are**] provided in the room, and 100 minute time limit will begin as soon as these instructions are complete and you receive your dog. Please plan your time accordingly."

**Assessment Sheet for Anesthesia (AN01)**—Please see Assessment Sheet AN01 on the following pages.

Note: a **FAILING** evaluation for any one (1) **MAJOR** skill or any combination of four (4) **MINOR** skills will result in a **FAILURE** for the Anesthesia Section. A candidate that commits a fatal flaw may be dismissed from the section and will also receive a **FAILURE** for the Anesthesia Section.

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<b>AN01 ASSESSMENT, Anesthetic Skills</b> <b>Candidate Name/ID:</b>		<b>Date/Session/Site:</b> <b>DVM Examiner:</b>
<b>ACTIVITY/SKILL</b> Candidate is assessed on ability to correctly and efficiently:	<b>CANDIDATE SCORE</b> <i>Note: a <b>FAILING</b> evaluation for any one (1) <b>MAJOR</b> skill or any combination of four (4) <b>MINOR</b> skills will result in a <b>FAILURE</b> for the Anesthesia Section. Candidates committing a fatal flaw (see below &amp; Appendix 1 in this section of the MOA) will be immediately dismissed from, and will receive a failing score for, this section of the CPE.</i>	
<i>Select appropriate premedication, induction, maintenance, and pain management drugs and write rationale for choosing drugs</i>	<b>MINOR SKILL</b>	
<i>Calculate the correct volume of drug(s) selected</i>	<b>MAJOR SKILL</b>  <b>EXAMPLES OF FATAL FLAWS FOR THIS SKILL INCLUDE:</b> <b>FATAL FLAW</b> if candidate calculates a potentially harmful overdose and does not correct it prior to attempting to administer the drug. <b>NOTE:</b> examiners/technicians must not allow a candidate to administer a potentially harmful overdose of any drug.	
<i>Perform and record results of a preoperative examination on a patient presented for elective ovariectomy</i>	<b>MINOR SKILL</b>	
<i>Request, record, and interpret results of minimum required laboratory tests</i>	<b>MINOR SKILL</b>	
<i>Assign an appropriate preanesthetic physical status to patient</i>	<b>MINOR SKILL</b>	

AN01 continued on next page

AN01 ASSESSMENT, Anesthetic Skills	
Candidate Name/ID:	Date/Session/Site:
ACTIVITY/SKILL Candidate is assessed on ability to correctly and efficiently:	CANDIDATE SCORE
<i>Administer premedication in a manner that is safe for the patient and personnel, and that allows for actual delivery of the drug to the patient</i>	<b>MAJOR/MINOR SKILL</b> <ul style="list-style-type: none"> <li>• <b>MINOR SKILL FAILURE</b> if candidate administers a dose above or below the appropriate range for the animal but not likely to have serious detrimental physiologic effects, or if candidate injects premedication at a site or in a manner that is inappropriate but unlikely to cause major harm to the animal</li> <li>• <b>MAJOR SKILL FAILURE</b> if candidate administers an inappropriately high dose that would have significant, but non-lethal, detrimental physiologic effects.</li> <li>• <b>MAJOR SKILL FAILURE</b> if candidate injects premedication in the vicinity of a structure that might be damaged by the injection (i.e., sciatic nerve, stifle joint).</li> <li>• <b>EXAMPLES OF FATAL FLAW INCLUDE</b> if candidate intends to administer a potentially harmful overdose of any drug, candidate administers premedications before examining the patient.</li> </ul>
<i>Determine appropriate fresh gas flow rates and explain rationale for selecting a given rate for the breathing system selected</i>	<b>MAJOR/MINOR SKILL</b> <ul style="list-style-type: none"> <li>• <b>MINOR SKILL FAILURE</b> if candidate sets fresh gas flow too high.</li> <li>• <b>MAJOR SKILL FAILURE</b> if candidate sets fresh gas flow is too low.</li> <li>• <b>FATAL FLAW</b></li> </ul> <p><b>EXAMPLE OF FATAL FLAW INCLUDES</b> setting the flow of oxygen at an insufficient level such that dog either awakens or becomes apparently hypoxic</p>
<i>Select appropriate breathing system and reservoir bag</i>	<b>MINOR SKILL</b>
<i>Select appropriate endotracheal tube and laryngoscope (use of laryngoscope optional).</i>	<b>MINOR SKILL</b>

AN01 continued on next page



<b>AN01 ASSESSMENT, Anesthetic Skills</b>	
<b>Candidate Name/ID:</b>	<b>Date/Session/Site:</b>
<b>ACTIVITY/SKILL</b> Candidate is assessed on ability to correctly and efficiently:	<b>CANDIDATE SCORE</b>
<i>Select appropriate size and type IV catheter</i>	<i>MINOR SKILL</i>
<i>Assemble the anesthetic machine and breathing system</i>	<i>MAJOR SKILL</i>
<i>Explain assembly of anesthetic machine and breathing system</i>	<i>MINOR SKILL</i>
<i>Test anesthetic machine circuit for leaks</i>	<i>MAJOR/MINOR SKILL</i> <ul style="list-style-type: none"> <li>• <i>MINOR SKILL FAILURE</i></li> <li>• <i>MAJOR SKILL FAILURE</i></li> <li>• <i>PASS</i></li> </ul>

*AN01 continued on next page*

AN01 ASSESSMENT, Anesthetic Skills	
Candidate Name/ID:	Date/Session/Site:
ACTIVITY/SKILL Candidate is assessed on ability to correctly and efficiently:	CANDIDATE SCORE
<p><b><i>Place and secure an IV catheter</i></b></p> <p><i>Note: If either of the two scenarios below should occur, the examiner or technician will place and secure a new IV catheter and the time required to do so will not count against the 100 minute time limit.</i></p> <ol style="list-style-type: none"> <li><i>If the candidate is unable to place the IV catheter in three attempts</i></li> <li><i>If a correctly placed catheter becomes dislodged following placement</i></li> </ol>	<p><b><u>PLACE IV CATHETER</u></b> <b>MAJOR/MINOR SKILL, WITH SCORE IMPACTED AS INDICATED BELOW.</b></p> <ul style="list-style-type: none"> <li>• <b>ONE MINOR SKILL FAILURES</b> if candidate is unable to place the IV catheter in three attempts because of a patient factor (eg, dog is unruly or hypotensive).</li> <li>• <b>TWO MINOR SKILL FAILURES</b> if candidate correctly places the IV catheter in three attempts but it becomes dislodged thereafter because he/she did not secure it appropriately.</li> <li>• <b>TWO MINOR SKILL FAILURES</b> if candidate is unable to place the IV catheter in three attempts because of poor technique or inability to locate an appropriate vein.</li> <li>• <b>ONE MINOR SKILL FAILURE</b> if candidate has minor breaks in asepsis during placement of IV catheter (eg. minor touch of catheter hub).</li> <li>• <b>MAJOR SKILL FAILURE IF CANDIDATE DECLINES ATTEMPTS AT CATHETER PLACEMENT</b></li> <li>• <b>EXAMPLES OF FATAL FLAW INCLUDE:</b></li> <li>• if candidate attempts to place or places the catheter in a non-aseptic manner or commits gross breaks in asepsis (eg, placing opened catheter on table)</li> </ul>
<p><b><i>Set up and administer IV fluids</i></b></p>	<p><b><u>IV FLUIDS</u></b> <b>MAJOR/MINOR SKILL, WITH SCORE IMPACTED AS INDICATED BELOW.</b></p> <ul style="list-style-type: none"> <li>• <b>MINOR SKILL FAILURE</b> if candidate does not connect and administer IV fluids in an aseptic manner</li> <li>• <b>MINOR SKILL FAILURE</b> if candidate sets an incorrect fluid rate and animal's health/life is not significantly affected.</li> <li>• <b>MAJOR SKILL FAILURE</b> if candidate sets an incorrect fluid rate or fails to recognize that fluid administration has been compromised and correct the error AND animal's health/life is significantly and negatively affected.</li> </ul>

AN01 continued on next page

AN01 ASSESSMENT, Anesthetic Skills	
Candidate Name/ID:	Date/Session/Site:
ACTIVITY/SKILL	CANDIDATE SCORE
Candidate is assessed on ability to correctly and efficiently:	
<i>Induce and intubate patient</i>	<p><u><b>MAJOR/MINOR SKILL</b></u></p> <ul style="list-style-type: none"> <li>• <b>MINOR SKILL FAILURE</b> if candidate fails to assess catheter placement prior to injection of induction agent.</li> <li>• <b>MAJOR SKILL FAILURE</b> if candidate does not appropriately intubate dog (eg, tube too small or too large; cuff not inflated appropriately (ie, cuff does not prevent leak up to 20 cm H<sub>2</sub>O); tube itself not secured but stays in due to luck).</li> </ul> <p><b>EXAMPLES OF FATAL FLAW INCLUDES:</b></p> <ul style="list-style-type: none"> <li>• <b>FATAL FLAW</b> if candidate intends to administer a potentially harmful overdose of any drug.</li> <li>• <b>FATAL FLAW</b> if candidate makes repeated unsuccessful attempts at intubation in an insufficiently anesthetized dog (i.e., a dog with active laryngeal reflexes). Candidate will be required to complete the following within 5 minutes of initial administration of induction agent: intubate the patient, assess that the tube is placed correctly, appropriately inflate cuff, secure endotracheal tube, and connect patient to the anesthetic machine; failure to complete all those tasks within the 5-minute limit is a fatal flaw.</li> <li>• <b>FATAL FLAW</b> if candidate fails to recognize endotracheal tube is placed incorrectly and dog is either not receiving gas because tube is in esophagus; dog is being injured, in the examiner's opinion, because of excessive inflation of the cuff or tube grossly too large; gas is being released because tube is grossly too small or cuff not inflated; or tube dislodges because it was not secured appropriately.</li> </ul>

AN01 continued on next page

AN01 ASSESSMENT, Anesthetic Skills	
Candidate Name/ID:	Date/Session/Site:
ACTIVITY/SKILL	CANDIDATE SCORE
Candidate is assessed on ability to correctly and efficiently:	
<i>Set the anesthetic machine appropriately and assess patient status within 3 minutes of intubation.</i>	<b><u>MAJOR SKILL</u></b>  <b>EXAMPLES OF FATAL FLAWS FOR THIS SKILL INCLUDE:</b> <ul style="list-style-type: none"> <li>• <b>FATAL FLAW</b> if candidate leaves pop-off valve closed until pop-off valve pressure reads 25 cm H<sub>2</sub>O.</li> <li>• <b>FATAL FLAW</b> if candidate sets flow of oxygen at an insufficient level such that dog either wakes up or becomes apparently hypoxic.</li> <li>• <b>FATAL FLAW</b> if candidate sets volatile anesthetic agent flow rate too high for too long leading to loss of peripheral pulses or prolonged (&gt; 3 min) apnea.</li> <li>• <b>FATAL FLAW</b> if candidate fails to recognize prolonged (&gt; 3 min) apnea.</li> </ul>
<i>Overall efficiency of anesthetic procedure</i>	<b><u>MAJOR SKILL</u></b>  <b>EXAMPLES OF FATAL FLAWS FOR THIS SKILL INCLUDE:</b> <b>FATAL FLAW</b> if candidate fails to have the dog ready for the surgery candidate in the one hundred minute time limit ("ready for surgery candidate" means all tasks outlined in the MOA are complete and the dog is intubated and anesthetized with IV fluids in place and operational/running).

<i>Place esophageal stethoscope</i>	<b>MINOR SKILL</b>
<i>Place/position Doppler or oscillometric blood pressure monitor</i>	<b>MINOR SKILL</b>
<i>Place/position pulse oximeter</i>	<b>MINOR SKILL</b>
<i>Place/position capnograph</i>	<b>MINOR SKILL</b>
<i>Transfer patient to surgery area</i>	<b>MINOR SKILL</b>  <b>FATAL FLAW IF PATIENT WAKES UP DURING TRANSFER AND CANDIDATE DOES NOT RESPOND APPROPRIATELY</b>

AN01 continued on next page

ASSESSMENT, Anesthetic Skills	
Candidate Name/ID:	Date/Session/Site:
ACTIVITY/SKILL Candidate is assessed on ability to correctly and efficiently:	CANDIDATE SCORE
<i>Monitor / assess depth of Anesthesia and change anesthetic machine settings as necessary during the surgical procedure</i>	<b>MAJOR SKILL</b>  <b>EXAMPLES OF FATAL FLAW INCLUDE:</b> <ul style="list-style-type: none"> <li>• Maintaining a volatile anesthetic agent flow rate at a high level for extended period of time leading to prolonged hypotension and/or hypercapnea.</li> <li>• Failure to identify and correct a potentially life-threatening or inhumane situation (eg, patient wakes up during anesthesia section or during the surgical procedure and candidate does not respond to situation.</li> </ul>
<i>Provide adequate analgesia to the patient throughout the surgical procedure and immediate post-operative period</i>	<b>MAJOR SKILL</b>  Example of fatal flaw includes: Candidate does not react to clinical signs of pain or nociception (tachycardia, tachypnea, increase in blood pressure, etc.) in a timely manner. If examiner has to add any pain medication for a humane reason, the candidate should be dismissed from the exam.
<i>Monitor/assess and record patient's cardiovascular and respiratory status, to include correcting any significant abnormalities</i>	<b>MAJOR SKILL</b>  <b>EXAMPLE OF FATAL FLAW INCLUDES:</b> Candidate is unable to manage cardiovascular or respiratory status in a timely fashion such that the animal's welfare may be adversely impacted ( eg. Unresolved hypotension, significant arrhythmias, unresolved hypercapnea)

AN01 continued on next page

<b>AN01 ASSESSMENT, Anesthetic Skills</b>	
<b>Candidate Name/ID:</b>	<b>Date/Session/Site:</b>
<b>CANDIDATE IS ALSO ASSESSED ON:</b>	<b>CANDIDATE SCORE</b>
<i>Answer questions regarding specific values for the patient from anesthetic or monitoring equipment</i>	<b>MINOR SKILL</b>
<i>Completely and appropriately fill out Anesthesia Record</i>	<b>MINOR SKILL</b>
<i>Humane handling of patient</i>	<b>MAJOR SKILL</b>  <b>EXAMPLE OF FATAL FLAW INCLUDES:</b> Any act of omission or commission that puts an animal into an inhumane or life threatening situation and the situation is not corrected by the candidate
<i>Ability to communicate with assistant(s)</i>	<b>MINOR SKILL</b>
<b>FINAL ANESTHESIA SECTION SCORE (PASS OR FAIL):</b> A <b>FAILING</b> evaluation for any one (1) <b>MAJOR</b> skill or any combination of four (4) <b>MINOR</b> skills will result in a <b>FAILURE</b> for the Anesthesia Section. Candidates committing a fatal flaw will be immediately dismissed from, and will receive a failing score for, this section.	

**Anesthesia Appendices****Appendix 1—Fatal Flaw List**

These are failing behaviors that potentially put the animal's life at risk or personnel in danger. All are behaviors that may require examiner intervention and will result in a failing grade for the candidate and dismissal from this section of the CPE. The examiner will stop the Anesthesia Section immediately if any one behavior from the following fatal flaw list is observed (ie, recognized by the examiner and confirmed by another examiner or observer):

1. Candidate calculates and intends to administer a potentially lethal overdose of any drug.
2. Candidate administers premedications before examining the patient.
3. Candidate attempts to place or places the catheter in a non-aseptic manner or commits gross breaks in asepsis (eg, placing opened catheter on table)
4. Candidate makes repeated unsuccessful attempts at intubation in an insufficiently anesthetized dog (ie, a dog with active laryngeal reflexes). Candidate should be able to intubate patient within five (5) minutes of initial administration of induction agent; failure to do so is a fatal flaw.
5. Candidate places the endotracheal tube in the esophagus and fails to correct in a timely fashion (ie, before dog wakes or becomes apparently hypoxic).
6. Candidate leaves the pop-off closed until pop-off valve pressure reads 25 cm H<sub>2</sub>O
7. Candidate sets flow of oxygen at an insufficient level such that dog either awakens or becomes apparently hypoxic
8. Candidate maintains volatile anesthetic agent flow rate at a high level for extended period of time leading to loss of peripheral pulses (dorsal pedal or lingual pulse) or prolonged (> 3 minutes) apnea.
9. Candidate fails to identify and correct a potentially life-threatening or inhumane situation (eg, patient wakes up during anesthesia section, transfer to surgery suite, or during the surgical procedure and candidate does not respond to situation; candidate does not attempt to correct problems associated with major hemorrhage/hypovolemia).
10. Candidate fails to have all tasks completed with the dog ready for the surgery candidate in the one hundred minute time limit ("ready for surgery candidate" means all tasks outlined in the MOA are complete and the dog is intubated and anesthetized with IV fluids in place and operating/running).
11. Candidate exhibits any other behavior that would put the dog's life at risk. The examiner must document the behavior.
12. Candidate fails to correctly assemble anesthetic machine to allow effective and safe delivery of gas anesthetic.

All fatal flaws **MUST** be documented on the candidate's assessment sheet by the examiner and verified by a secondary examiner/CPE team member.

**Appendix 2—Preanesthetic Physical Status**

## American Society of Anesthesiologists (ASA) Classification System

- ASA Status 1: Normal, healthy patient
- ASA Status 2: Mild systemic disease, well compensated
- ASA Status 3: Moderate systemic disease that is ongoing but compensated; some functional limitations exist that increase the risk of anesthesia
- ASA Status 4: Severe systemic disease that is a constant threat to life, uncompensated disease, high anesthetic risk because vital body systems involved
- ASA Status 5: Moribund patient not expected to live more than 24 hours with or without surgery



CPE DATE/SESSION/SITE:

CANDIDATE NAME/NUMBER:

DOG ID:

INFORMATION TO BE PROVIDED TO CANDIDATE AT BEGINNING OF EXAM:

Weight of dog:

Approximate age (estimated by examiner/tech):

Pre-existing medication or medical conditions

**Appendix 3—Anesthesia Record**CPE DATE/SESSION/SITE:CANDIDATE NAME/NUMBER:DOG ID:**PRE-ANESTHETIC ASSESSMENT** (*candidate to write findings below unless otherwise noted*)Weight (provided by examiner/tech):

HR:

RR:

MM color/CRT:

Temp:

Other relevant preanesthetic PE findings, if any:**LABORATORY RESULTS:**

PCV:

TP:

BUN:

Other relevant preanesthetic lab results, if any:**PRE-EXSISTING MEDICATION AND MEDICAL CONDITIONS** (*provided by examiner*)

**PREANESTHETIC PHYSICAL STATUS** (*as determined by candidate after completing preanesthetic examination; circle one*):      1      2      3      4      5

**ANESTHESIA RECORD (Page 2)**CPE DATE/SESSION/SITE:CANDIDATE NAME/NUMBER:**Anesthetic Drug Protocol Plan:**

*Write drug selections, dose (mg and volume), route of administration, and time administered below; attach dose calculation scratch sheet as necessary:*

**Premed(s):**

Name:	Dose:	Volume:	Route:	Time:
Name:	Dose:	Volume:	Route:	Time:
Name:	Dose:	Volume:	Route:	Time:

**Induction agent(s):**

Name:	Dose:	Volume:	Route:	Time:
Name:	Dose:	Volume:	Route:	Time:
Name:	Dose:	Volume:	Route:	Time:

**Analgesics:**

Name:	Dose:	Volume:	Route:	Time:
Name:	Dose:	Volume:	Route:	Time:
Name:	Dose:	Volume:	Route:	Time:

**Intravenous Fluid Therapy:**

Name:	Rate:
-------	-------

*Provide rationale for choosing the specific drugs (above) for your patient:*

**ANESTHESIA RECORD (Page 3)**CPE DATE/SESSION/SITE:CANDIDATE NAME/NUMBER:

*Circle appropriate number regarding sedation and induction of your patient, and provide comments as appropriate:*

Scale: 1=very poor; 5= excellent

Sedation quality: 1   2   3   4   5

Induction quality: 1   2   3   4   5

Comments:

*Circle inhalant anesthetic agent used:*

Halothane                  Isoflurane                  Sevoflurane

*Circle anesthetic machine type used*

Rebreathing      Non-rebreathing

Endotracheal tube used (*write size*):

Fresh gas flow rate used (*write rate*):

*Candidate to complete all appropriate portions of anesthetic chart on next page.*

*Request additional pages as needed.*

## ANESTHESIA RECORD (Page 3+)

CPE DATE/SESSION/SITE:CANDIDATE NAME/NUMBER:

Fluids (ml/hr)		TIMES:														
		Hour:Min.	:00	:15	:30	:45	1:00	1:15	1:30	1:45	2:00	2:15	2:30	2:45	3:00	
O <sub>2</sub> Flow																
ET CO <sub>2</sub>																
Pulse Oximetry																
Body Temperature																
Vaporiser Setting	6 5 4 3 2 1 0															
Start PPV	200 180 160 140 120 100 80 60 40 20 16 12 8 4 0															
Start Surgery																
End Surgery																
Mean B.P.																
Systolic B.P.																
Diastolic B.P.																
CODE: Pulse																
Respiration																

*Time at :00 = Time of induction*

**ANESTHESIA RECORD (Page 4)**

CPE DATE/SESSION/SITE:

CANDIDATE NAME/NUMBER:

*(candidate to fill out each section below)*

**Complications noted and how corrected; if no complications noted, state so:**

**Fluids (write type used, flow rate, and total volume):**

**Recovery instructions, to include any instructions for use of analgesics:**

**Candidate Signature:**

*Appendix 4—Anesthesia Equipment Incident Report*

**Anesthesia Equipment Incident Report**

Briefly describe any anesthesia equipment related incidents (i.e., malfunction) that occurred that may have affected the outcome of your examination.

---

**Candidate Notes:**

Candidate Number:

Candidate signature, date:

**Examiner Notes:**

Examiner Name (print):

Second Examiner Name:

Examiner signature, date:

Second Examiner Signature:

## EQUINE PRACTICE

### Competencies

The equine portion will assess the candidate's ability to:

- Evaluate a clinical case (Station 1: Clinical Evaluation)
- Perform and/or discuss designated clinical techniques (Station 2: Clinical Techniques)
- Evaluate lameness (Station 3: Lameness Evaluation)

### Time

Maximum time, 2.25 hours (45 minutes per station)

### Set-up Information

- Animal Requirements
  - a. Station 1: Clinical Evaluation: One horse of mild temperament, sedated as necessary; the horse may or may not have abnormal clinical signs. If a healthy horse is used, management advice will be sought on three of the following five scenarios chosen by the examiner:
    - i. Feeding/housing
    - ii. Vaccination
    - iii. Deworming
    - iv. Dental care
    - v. Foot care
  - b. Station 2: Clinical Techniques: One normal horse of mild temperament, sedated as necessary
  - c. Station 3: Lameness Evaluation: One horse affected with a common lameness (eg, American Association of Equine Practitioners [AAEP] Grade 3/5). Lameness must be detectable at a trot in a straight line.
- People Requirements
  - a. One veterinary examiner per candidate at each station.
  - b. One assistant per candidate as needed. Please note: assistant means an unskilled assistant. Candidate must direct activity of the unskilled assistant. The examiner may act as an unskilled assistant where appropriate.
- Facilities and Equipment
  - a. 1 room/area for clinical evaluation station (Station 1)
  - b. 1 room/area for clinical techniques station (Station 2)
  - c. 1 area to evaluate a horse's gait and to perform a lameness examination (Station 3)
  - d. Timing device visible from each station to track examination time. Whenever possible, timers will be of the "count-down" variety to allow candidates and examiners alike to clearly see time remaining in station or section.
- The candidate is expected to have the following supplies:
  - a. Stethoscope
  - b. Digital rectal thermometer
  - c. Penlight



- d. Coveralls
- e. Safety boots (ie, appropriate footwear for equine work).
- All other items necessary to complete the exam will be provided by the examining site, including the following:
  - a. Halter, lead rope, lead shank, assorted twitches, towels, tape measure.
  - b. Assortment of needles, syringes, vacutainers and disinfectants (alcohol, chlorhexidine, etc), gauze sponges.
  - c. Assorted dental rasps (floats), assorted mouth gags and speculae, flashlight.
  - d. Assorted nasogastric tubes, lubricant, bucket, mineral oil, funnel, dose syringe, stomach pump.
  - e. Assorted bandages.
  - f. Injectable saline, assorted sedatives and dosages (xylazine, acepromazine, detomidine, romifidine, etc)
  - g. Rebreathing bag, plexor, pleximeter, ophthalmoscope
  - h. Hoof pick, left- and right-handed hoof knives, assorted hoof testers

### **General Requirements of the Candidate**

Candidates are expected to handle all animals in a humane and safe manner. If, in the opinion of the examiner, the candidate does not handle the animal humanely or handles the animal in a manner that is unsafe to him/her or other personnel the examiner may assess penalties ranging from a reduction in score to dismissal of the candidate with a fatal flaw and a score of zero for the station. The exam will also be terminated and the candidate dismissed if, in the opinion of the examiner, the candidate is jeopardizing the health and well-being of the animal patient.

### **Station One—Clinical Evaluation**

**Overview of Station One**—The examiner will act as a client with an adult horse that is affected with a condition commonly found in veterinary practice. The candidate should:

- Catch and restrain the horse in a box stall with a halter and lead rope. The examiner or other assistant may assist the candidate but the candidate must give specific instructions for assistance
- question the client/examiner to determine the medical history of the patient
- perform a systematic distance examination and a physical examination
- develop an initial problem list and a differential diagnoses list
- request appropriate and reasonable diagnostic tests
- interpret the results of diagnostic tests
- determine the most likely diagnosis based upon history, physical examination, and diagnostic test results
- develop a therapeutic and/or management plan specific for the patient and/or the herd
- develop a prognosis for the patient
- identify prevention and control issues
- orally communicate all of the above information to the client/examiner

(Note—See also the EQ01 assessment sheet that follows)

**Standard Script for Station One**—Prior to beginning this station, the examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. Timing of the candidate’s performance should not begin until all of the instructions have been given.

“In this station you will be the veterinarian called to examine the horse in front of you. I will be acting as the client. Please obtain a complete history from me. Then, perform a complete physical examination and explain all abnormal and normal findings to me. If you believe a rectal examination is indicated, you may request one and I will provide you with any information obtained from the rectal examination. You may record the history and physical exam findings yourself, using this form [examiner: please refer to Appendix 1], but you should discuss your findings with me as well OR Discuss your findings with me, and I will record your findings on this form. Based upon the history and physical examination, you should generate a problem list, create a list of differential diagnoses, and select the most likely diagnosis. Then, develop a diagnostic plan. You may request pertinent test results from me and I will supply those results if those laboratory tests were completed. Develop a complete therapeutic and/or management plan for this animal and/or the herd and discuss the plan and any prevention or control issues with me that you feel are necessary. Again, record your findings and concerns on the form provided [examiner: please refer to Appendix 1] while communicating them to me OR Communicate your findings and concerns with me (the client), and I will record them on this form. You will have 45 minutes to complete this station, and you are responsible for monitoring your time remaining.”

**Assessment Sheet for Equine Practice—Station One (EQ01)**

<b>EQ01 ASSESSMENT, Clinical Evaluation</b>		
<b>Candidate Name/ID:</b>	<b>Date/Session/Site:</b>	
<i>Activity/Skill</i>	<b>MAX POINTS</b>	<b>CANDIDATE SCORE</b>
<b>History</b>	<b>20</b>	
<b>Restraint and Safety</b> Candidate is scored on ability to halter and restrain a horse, including physical and/or chemical means if necessary. A candidate may receive assistance by specifically instructing the client or technician on safe handling techniques.  Note: A Fatal Flaw will be issued to candidates unable to complete this activity within 10 minutes.	<b>5</b>	
<b>Physical Examination</b>	<b>33</b>	
<i>a. Distance examination, including body condition</i>		
<i>b. Complete and appropriate (for the case) hands-on examination</i>		

EQ01 continued on next page

EQ01 ASSESSMENT, Clinical Evaluation		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	MAX POINTS	CANDIDATE SCORE
<b>Integration of Clinical Information</b>	<b>15</b>	
<p><i>a. Correctly identify and communicate all problems, based upon history and physical exam findings</i></p> <p>Problems identified correctly:                      Problems not identified:</p>		
<p><i>b. Develop and communicate a rational differential diagnoses list based upon history and physical exam</i></p> <p>DDx correctly identified:                      DDxs not identified:</p>		
<b>Integration of Diagnostic Information</b>	<b>12</b>	
<p><i>a. Develop a diagnostic plan - Order appropriate diagnostic tests and/or necropsy</i></p> <p><b>Dx tests ordered appropriately:</b></p> <p><b>Dx tests indicated but not ordered:</b></p> <p><b>Dx tests ordered but not indicated:</b></p>		
<p><i>b. Interpret laboratory and/or necropsy results - Uses diagnostic test results to refine the differential diagnoses list and describes how each test is used to rule in or rule out a diagnosis</i></p>		
<p><i>c. Arrive at the most likely diagnosis</i></p> <p><b>Candidate Dx:</b></p> <p><b>Actual most likely Dx:</b></p>		
<b>Develop therapeutic or management plan for individual animal/herd (if appropriate)</b>	<b>5</b>	
<p><i>a. Developing a therapeutic plan specific for the patient (or herd), to include addressing treatment and appropriate follow-up. The candidate should also address prevention and control issues.</i></p>		
<p><i>b. Developing the appropriate prognosis</i></p>		

EQ01 continued on next page

<b>EQ01 ASSESSMENT, Clinical Evaluation</b> <b>Candidate Name/ID:</b> _____ <b>Date/Session/Site:</b> _____		
<i>Activity/Skill</i>	<b>MAX POINTS</b>	<b>CANDIDATE SCORE</b>
<b>Communication</b>	<b>10</b>	
<i>a. Communicate clearly and effectively using language that might be readily understood by a client</i>		
<i>b. Answer all questions correctly and appropriately</i>		
<b>TOTAL POINTS</b>	<b>100</b>	

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**Station Two—Clinical Techniques**

**Overview of Station Two**— Given a horse of mild temperament, the candidate will be expected to complete 8 skills commonly utilized in equine practice.

**Standard Script for Station Two**—Prior to beginning this station, the examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. The time should not begin until all of the instructions have been given.

“In this Clinical Techniques Station, you will use this horse to perform 8 standard equine clinical procedures. You should explain to me what you are doing as you are demonstrating or performing these clinical techniques. You will have a total of 45 minutes to complete all skills, so please plan accordingly.”

1. Completely auscultate the thorax (cardiorespiratory system), using a rebreathing bag.
2. Identify usual IM, IV, and SQ injection sites and perform an intravenous and intramuscular injection, using injectable saline. Discuss injection volume, method of injection, and possible complications for one of the following drugs to be randomly chosen: xylazine, phenylbutazone, procaine penicillin, banamine (flunixin meglumine), acepromazine.
3. Estimate the age of the horse, and discuss and demonstrate rasping (floating) of the upper cheek teeth, using manual tools.
4. Place a support (aka standing, shipping, or stable) bandage on a forelimb.
5. Discuss how to safely perform a rectal examination.
6. Perform a basic ophthalmic examination, using a direct scope.
7. Describe how to perform abdominocentesis, including selection of needles/tubes.
8. Describe the horse for the purpose of positive identification for equine infectious anemia (EIA) testing, insurance examination, or interstate health certificates, as directed by the examiner. Identify appropriate needles and tubes for collection of blood sample for serum biochemistry, complete blood count, or equine infectious anemia test.

**Assessment Sheet for Equine Practice—Station Two (EQ02)**

EQ02 ASSESSMENT, Clinical Techniques		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	MAX POINTS	CANDIDATE SCORE
Candidate is scored on ability to correctly and efficiently perform the eight (8) skills:		
i. Completely auscultate the thorax (cardiorespiratory system), using a rebreathing bag	15	
ii. Identify usual IM, IV, and SQ injection sites and: a. Perform an intravenous and intramuscular injection, using injectable saline; and b. Discuss injection volumes, method of injection, and possible complications of one of the following drugs, which is randomly selected by the examiner: xylazine, phenylbutazone, procaine penicillin, banamine (flunixin meglumine), acepromazine	15	
iii. Estimate age; and discuss and demonstrate rasping (floating) of upper cheek teeth	11	
iv. Place a support (aka standing, shipping, or stable) bandage on a forelimb	11	
v. Discuss how to safely perform a rectal examination	11	
vi. Perform a basic ophthalmic examination, using a direct scope	11	

*EQ02 continued on next page*



EQ02 ASSESSMENT, Clinical Techniques		
Candidate Name/ID:	Date/Session/Site:	
<i>Activity/Skill</i>	<b>MAX POINTS</b>	<b>CANDIDATE SCORE</b>
vii. Describe how to perform abdominocentesis, including selection of needles/tubes	11	
viii. Describe horse for the purpose of positive identification for one of the following (determined by examiner): EIA (equine infectious anemia) testing, insurance examination, or interstate health certificates. Select correct needles and blood tube for testing for equine infectious anemia (EIA), serum biochemistry analysis, or complete blood count (CBC), as directed by examiner.	15	
<b>TOTAL POINTS</b>	<b>100</b>	

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### Station Three—Lameness Evaluation

**Overview of Station Three**—In this station, the candidate will examine a lame horse. The candidate should obtain a history from the client/examiner and then observe the horse at a walk and trot to determine the lame limb. The candidate should explain how he/she determined which limb was affected and discuss appropriate general principles related to equine lameness (eg, how to differentiate fore-limb vs hind-limb lameness and how to determine left vs. right limb).

The candidate will then systematically examine the affected limb in order to localize the problem. **Note:** A candidate will only receive points for the systematic examination if it is performed on the actual affected limb; in other words, the leg on which the horse is lame. Such an examination should usually include: characterization of digital pulses, picking up and cleaning the foot, examination with hoof testers, detailed palpation of the limb, and manipulation of joints.

The candidate may perform appropriate flexion tests to localize the lameness and discuss associated principles, or should justify why flexion tests are not appropriate for the case.

The candidate will not be expected to perform any regional nerve blocks, but he/she will have to describe how to perform palmar/plantar digital, abaxial sesamoid, and low and high volar nerve blocks and associated principles (eg, landmarks, preparation, technique, desensitized areas, etc), regardless of the actual lameness in his/her patient. The candidate will then indicate what nerve and/or joint block(s) would be appropriate to assist in diagnosing the specific lameness in the horse they are examining. The examiner will provide the results of the nerve block(s) requested. If the candidate believes no nerve/joint blocks are required, he/she should justify that decision.

The candidate will not be expected to perform imaging examinations, but should indicate what imaging studies are appropriate for the horse they are examining. If the candidate believes no imaging is required, he/she should justify that decision. If the candidate requests radiographic studies that are appropriate for the case, the examiner will provide either film or digital images for the candidate to interpret.

The candidate should formulate a conclusion regarding the affected anatomical region leading to lameness and communicate the source of the lameness to the examiner, and state what the likely prognosis is for the condition.

During this station, the candidate will also be asked to locate 5 anatomical structures randomly assigned from the 20 listed on the assessment sheet (EQ03).

**Standard Script for Station Three**—Prior to beginning this station, the examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. The time should not begin until all of the instructions have been given.

“In this station you will be the veterinarian called to examine the horse in front of you for a lameness problem. I will be acting as the client. Our technician can provide assistance, but ONLY according to your instructions. Please obtain a complete history from me. Then, perform a complete lameness examination and explain all abnormal and normal findings to me. You should also discuss general principles related to equine lameness (eg, how to identify fore- vs

hind-limb lameness, how to differentiate left vs right limb lameness, etc) with me, the client, and identify the five structures I specify.

You will need to correctly identify the lame limb and explain on what basis you made that identification. Once you identify the lame limb, you must systematically examine the limb to localize the lameness. You should also perform appropriate flexion tests of the lame limb and discuss the associated principles, or, if you believe no flexion tests are necessary to localize the lameness, you should justify why a flexion test is not appropriate.

You will not be required to perform regional anesthesia. However, you will need to describe how to perform palmar/plantar digital, abaxial sesamoid, low volar, and high volar nerve blocks, and discuss the associated principles (eg, landmarks, preparation, technique, desensitized areas, etc). You will then recommend to me what specific nerve and/or joint block(s) are needed to assist in the /localization of the lameness in the horse you are examining. Or, if you believe no nerve and/or joint blocks are required to diagnose/localize the lameness, you should justify that decision. Results of the nerve and joint blocks that you request for your specific patient will be provided to you.

You should then recommend what types of imaging studies are appropriate to diagnose the lameness. Or, if you believe no imaging is required, you should justify that decision. Results of radiographic studies that you request and that have been completed will be provided to you.

After your examination is complete, you should communicate the source of the lameness—that is the affected anatomical region—and the short- and long-term prognoses for return of this horse to its intended use to me. You have 45 minutes to complete this station.”

***Assessment Sheet for Equine Practice—Station Three (EQ03)***

EQ03 ASSESSMENT, Lameness Evaluation		
Candidate Name/ID:		Date/Session/Site:
Activity/Skill	MAX POINTS	CANDIDATE SCORE
<b>History</b> Candidate is assessed on ability to elicit following from client (examiner):	5	
<b>Initial Characterization of Lameness Based on Walk/Trot:</b> Candidate is assessed on ability to:	35	
a. Describe head or hip position in relation to stride (fore vs. hind limb)		
b. Describe normal/abnormal parts of stride (to include at a minimum landing, length, sound, symmetry)		
c. Identify the lame limb and explain reasons for diagnosing the lameness in a specific limb in the patient provided. Points are only awarded when the candidate correctly identifies the lame leg.		

<b>Lameness Examination</b> Candidate is assessed on ability to perform the following items:	45	
a. Characterization of digital pulses		
b. Picking up, examining the foot, and applying hoof testers		
c. Detailed palpation of the limb for identification of effusions and swellings, heat and pain		
d. Manipulation of joints		
e. Demonstrate flexion test(s) appropriate for the lameness presented		
f. Describing how to do palmar/plantar digital, abaxial sesmoid, and low and high volar nerve blocks, to include at minimum identification of landmarks used to identify the injection site, how to prepare the site, injection technique, appropriate drugs, and area desensitized by each nerve block). <b>Examiners provide results of each nerve block for case presented.</b>		
g. Requesting appropriate imaging studies, or justification for not requesting/performing any imaging		
h. Identification of correct affected anatomical region based on results of all examinations and tests conducted		
i. Communicating short and long-term prognosis for return to intended use.		

EQ03 continued on next page

EQ03 ASSESSMENT, Lameness Evaluation		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	MAX POINTS	CANDIDATE SCORE
<b>Palpation</b> Candidate is assessed on ability to correctly identify five of the following 20 structures randomly selected by the examiner. Examiner must circle the structures selected for each candidate. Candidate will be awarded a maximum of three points for each structure correctly identified. (Note: limb structures do not need to be identified on the lame leg; they can be identified on any limb or on the limb indicated by the examiner)	15	
a. Cannon bone (MC III)		
b. Splint bones (MC II and MC IV)		
c. Fetlock joint pouches (metacarpal-phalangeal joint)		
d. Suspensory ligament		
e. Superficial digital flexor/deep digital flexor tendon		
f. Central sulcus of the frog		
g. Scapulohumeral joint		
h. Accessory carpal bone		
i. Olecranon		
j. Calcaneus		
k. Patella		
l. Medial patellar ligament		
m. Coxofemoral joint		
n. Greater trochanter		
o. Carpus or tarsus		
p. Tuber ischii		
q. Tuber sacrale		
r. Tuber coxae		
s. Withers		
t. Semitendinosus/semimembranosus muscles		
<b>TOTAL POINTS</b>	<b>100</b>	

*Equine Practice Summary Score Sheet*

Please see table below. This is the final summary score sheet.

<b>EQ04 SCORE SHEET (Equine Practice Summary and Final Score Sheet)</b>			
<b>Candidate ID:</b>		<b>Date:</b>	
	<b>Raw points awarded</b>	<b>Weighting</b>	<b>Weighted points awarded</b>
<b>STATION 1; Clinical Evaluation, EQ01</b>		<b>40%</b>	
<b>STATION 2; Clinical Techniques, EQ02</b>		<b>25%</b>	
<b>STATION 3; Lameness Evaluation, EQ03</b>		<b>35%</b>	
<b>FINAL SCORE (60 weighted points required to pass)</b>		<b>100%</b>	

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## **Equine Practice Appendices**

### ***Appendix 1—Blank Page for Candidate Notes***

#### **Candidate Notes—Station 1—Equine Practice**

Examiners must make this form available to each candidate to allow the candidate to write notes regarding the candidate's findings during the clinical case station.

The goal is for all sites to use these forms. The Section Coordinator and Examiner(s) may also use this form to create an answer key ahead of time.

Candidate Name/Number \_\_\_\_\_

Date/Session (AM/PM) \_\_\_\_\_

CPE site \_\_\_\_\_

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## FOOD ANIMAL PRACTICE

### Competencies

The food animal practice portion will assess the candidate's ability to:

- Evaluate an adult bovine (> 6 months of age) clinical case, including evaluation of herd health and regulatory issues (Station 1: clinical case, bovine station)
- Evaluate a bovine calf (< 6 months of age) or a caprine or ovine clinical case, including evaluation of herd health and regulatory issues (Station 2: clinical case, other food animal station)
- Perform designated clinical skill procedures (Station 3: clinical procedures station)
- Perform bovine reproductive procedures (Station 4: bovine theriogenology and public health, food safety, and regulatory issues station)
- List drugs prohibited for extra-label use in food animals in the United States or Canada (Station 4: bovine theriogenology and public health, food safety, and regulatory issues station)

### Time

Maximum time, 3 hours (break down of time given below; candidates will **NOT** be allowed additional time for any station)

1. Clinical case, bovine station: 45 minutes **maximum**
2. Clinical case, other food animal station: 45 minutes **maximum**
3. Clinical procedures station: 2 areas; total time: 45 minutes **maximum**
4. Bovine theriogenology and public health, food safety, and regulatory issues station: 3 areas; total time for Area A: 10 minutes **maximum** (3 minutes for rectal palpation); total time for Areas B and C combined: 35 minutes **maximum**

### Set-up Information

1. Animal Requirements
  - a. Case stations
    - i. Station 1—One bovine animal > 6 months of age.
    - ii. Station 2—One bovine animal < 6 months of age **OR** one ovine **OR** one caprine animal.
  - b. Procedures station
    - i. Station 3—One **lactating** cow.
  - c. Bovine theriogenology and public health, food safety, and regulatory issues station
    - i. Station 4, Part A—One sexually mature cow.
2. People Requirements
  - a. Clinical case, bovine station (Station 1): One veterinary examiner per candidate (45 minutes).
  - b. Clinical case, other food animal station (Station 2): One veterinary examiner per candidate (45 minutes).
  - c. Clinical procedures station (Station 3): One veterinary examiner per candidate (45 minutes).
  - d. Bovine theriogenology and public health, food safety, and regulatory issues station (Station 4): One veterinary examiner per candidate (45 minutes).
3. Facilities and Equipment
  - a. 2 rooms/areas for restraining food animals (case presentations; Stations 1 and 2)
  - b. 1 room/area for restraining a bovine animal (procedures station; Station 3)

- c. 1 room/area for restraining a bovine animal, placing an obstetric box, and writing a brief list (bovine theriogenology and public health, food safety, and regulatory issues station; Station 4)
  - d. Timing device visible from each station to track examination time. Whenever possible, timers will be of the “count-down” variety to allow candidates and examiners alike to clearly see time remaining in station or section.
4. Supplies/Information Provided By The Examiner
    - a. Bucket, water, towels, halter, mouth gag, nose tongs, stomach tube
    - b. Speculum, lubricant, container for ruminal fluid
    - c. Milk sample collection vials (for bacterial culture), milk sample
    - d. CMT (California Mastitis Test) paddle solution/reagent, assorted vacutainers
    - e. Container for urine sample, urine test sticks, product information and references, clipboard
    - f. Rectal gloves and other gloves, standard bovine obstetrical equipment
  5. Supplies Provided By The Candidate
    - a. Stethoscope, digital thermometer, and penlight
    - b. Coveralls and disinfectable footwear

### **General Requirements of the Candidate**

Candidates are expected to handle all animals in a humane and safe manner. If, in the opinion of the examiner, the candidate does not handle the animal humanely or handles the animal in a manner that is unsafe to him/her or other personnel the examiner may assess penalties ranging from a reduction in score to termination of the exam and dismissal of the candidate with a failing score. The exam will also be terminated and the candidate dismissed if, in the opinion of the examiner, the candidate is jeopardizing the health and well-being of the animal patient.

### **Station One—Clinical Case, Bovine**

**Overview of Station One**—The examiner will act as a client with an adult cow (> 6 mo of age) that is affected with a condition commonly found in veterinary practice. The candidate should:

- question the client/examiner to determine the medical history of the patient
- perform a systematic distance examination and a physical examination
- develop an initial problem list and a differential diagnoses list
- request appropriate and reasonable initial diagnostic tests
- interpret the results of diagnostic tests
- determine the most likely diagnosis
- develop a therapeutic and control plans specific for the patient and/or the herd
- develop a prognosis for the patient
- identify and regulatory and public health implications
- orally communicate all of the above information to the client/examiner.

The candidate may request appropriate diagnostic tests from the examiner in conjunction with the above case. The examiner will provide results (with normal values) of only those tests completed.

***Standard Script for Station One***—Prior to beginning this station, the examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. The time should not begin until all of the instructions have been given.

“In this station you will be the veterinarian called to examine the cow in front of you. I will be acting as the client. Please obtain a complete history from me. Then perform a complete physical examination, and describe abnormal and normal findings to me. If you believe a rectal examination is indicated, you may request it and I will provide you with the findings obtained from the rectal examination. Then, based upon the history and physical examination, you should generate a problem list, and create a list of differential diagnoses. Then, develop a diagnostic plan. You may request appropriate diagnostic tests, as long as I, the client, agree to spend the money for those tests. I will supply the results of only those laboratory tests that were completed. At that point, you should communicate the most likely diagnosis to me. Develop a complete therapeutic and management plan for this animal and/or the herd and discuss any public health issues or regulatory concerns that you feel are necessary. You will have 45 minutes to complete this station, and you are responsible for monitoring your time remaining.”

***Assessment Sheet for Food Animal Practice—Station One (FAP01)***

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FAP01 ASSESSMENT, Clinical Case, Adult Bovine		
Candidate Name/ID:		Date/Session/Site:
Activity/Skill	Max Pts	Candidate Score
<b>History:</b>	15	
<b>Physical Examination:</b>	25	
a. Accurately perform a distance examination, to include body condition score (Scale of 1–5, with 1 being very thin). Candidates should communicate normal and abnormal findings to the examiner.		
b. Accurately perform a complete physical examination. Candidates should communicate normal and abnormal findings to the examiner.		
c. Accurately interpret results of rectal examination, if appropriate		
<i>Note: discussion only with the examiner, rectal examination NOT performed by candidate.</i>		

<b>Integration of Clinical Information:</b>	15	
a. Correctly identify and communicate all problems, based on history and physical examination		
b. Develop and communicate rational differential diagnoses list based on history and physical examination		
<b>Developing a Diagnostic Plan:</b>	10	
<i>Note: The candidate will be assessed on the development of a diagnostic plan towards differential diagnoses that are appropriate for the case.</i>		
a. Order appropriate diagnostic test and/or necropsy		

FAP01 continued on next page

FAP01 ASSESSMENT, Clinical Case, Adult Bovine		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	Max Pts	Candidate Score
<b>Integration of Diagnostic Information:</b>	<b>15</b>	
<i>a. Interpretation of test results</i>		
<i>b. Use test results to appropriately rule in and rule out differential diagnoses</i>		
<i>c. Arrive at the most likely diagnosis</i>		
<b>Therapeutic and Management Plan :</b> <i>Note: The candidate will be assessed on the development and communication of a therapeutic and management plan towards the most likely diagnosis appropriate for the case. No points will be awarded for a therapeutic plan based on an incorrect diagnosis.</i>	<b>15</b>	
<i>a. Develop a correct therapeutic/management plan for individual animal (and/or herd, if indicated)</i>		
<i>b. Develop an appropriate prognosis</i>		
<i>c. Competently discuss prevention and control issues</i>		
<i>d. Competently discuss regulatory issues (eg, notifying state/federal health officials of reportable disease); public health issues (eg, zoonotic potential); food safety/slaughter for food issues (eg, withdrawal times)</i>		
<b>Communication:</b> <b>Candidate is assessed based upon their ability to:</b>	<b>5</b>	
<i>a. Communicate clearly and effectively using language that might be readily understood by a client</i>		
<i>b. Answer all questions correctly and appropriately</i>		
<b>TOTAL POINTS</b>	<b>100</b>	



**Station Two—Clinical Case, Other Food Animal**

**Overview of Station Two**—The examiner will act as a client with a calf or goat or sheep that is affected with a condition commonly found in veterinary practice. The candidate should:

- question the client/examiner to determine the medical history of the patient
- perform a systematic distance examination and a physical examination
- develop an initial problem list and a differential diagnoses list
- request appropriate and reasonable initial diagnostic tests
- interpret the results of diagnostic tests
- determine the most likely diagnosis
- develop a therapeutic and control plans specific for the patient and/or the herd
- develop a prognosis for the patient
- identify and regulatory and public health implications
- orally communicate all of the above information to the client/examiner

When required and requested by the candidate, standard laboratory data for appropriate diagnostic tests will be provided in written form with normal values.

(Note—See also example FAP02 assessment sheet on the following pages)

**Standard Script for Station Two**—Prior to beginning this station, the examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. The time should not begin until all of the instructions have been given.

“In this station, you will be the veterinarian called to examine the animal in front of you. I will be acting as the client. Please obtain a complete history from me. Then, perform a complete physical examination and describe abnormal and normal findings to me. Then, based upon the history and physical exam, you should generate a problem list, create a list of differential diagnoses, and select the most likely diagnosis. Then, develop a diagnostic plan. You may request pertinent laboratory data from me, as long as I, the client, agree to spend the money for those laboratory tests. You will be supplied results of only those laboratory tests that were completed. Develop a therapeutic and management plan for this animal and/or the herd and discuss any public health issues or regulatory concerns that you feel are necessary. You will have 45 minutes to complete this station, and you are responsible for monitoring your time remaining.”

**Assessment Sheet for Food Animal Practice—Station 2 (FAP02)**

FAP02 ASSESSMENT, Clinical Case, Other Food Animal		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	Max Pts	Candidate Score
<b>History:</b>	<b>15</b>	
<b>Physical Examination:</b>	<b>25</b>	
<i>a. Accurately perform a distance examination. Candidates should communicate normal and abnormal findings to the examiner.</i>		
<i>b. Accurately assign a body condition score (scale of 1-5, with 1 indicating very thin).</i>		
<i>c. Accurately perform a complete physical examination. Candidates should communicate normal and abnormal findings to the examiner.</i>		
<b>Integration of Clinical Information:</b>	<b>15</b>	
<i>a. Correctly identify and communicate all problems, based on history and physical examination</i>		
<i>b. Develop and communicate a rational differential diagnoses list based on history and physical examination</i>		
<b>Developing a Diagnostic Plan:</b>	<b>10</b>	
<i>Note: The candidate will be assessed on the development of a diagnostic plan towards differential diagnoses that are appropriate for the case.</i>		
<i>a. Order appropriate diagnostic test and/or necropsy</i>		

FAP02 continued on next page

FAP02 ASSESSMENT, Clinical Case, Other Food Animal		
Candidate Name/ID:		Date/Session/Site:
Activity/Skill	Max Pts	Candidate Score
<b>Integration of Diagnostic Information:</b>	<b>15</b>	
<i>a. Interpretation of test results</i>		
<i>b. Use test results to appropriately rule in and rule out differential diagnoses</i>		
<i>c. Arrive at the most likely diagnosis</i>		
<b>Therapeutic and Management Plan:</b> <i>Note: The candidate will be assessed on the development and communication of a therapeutic and management plan towards the most likely diagnosis appropriate for the case. No points will be awarded for a therapeutic plan based on an incorrect diagnosis.</i>	<b>15</b>	
<i>a. Develop a correct therapeutic/management plan for individual animal (and/or herd, if indicated)</i>		
<i>b. Develop an appropriate prognosis</i>		
<i>c. Competently discuss prevention and control issues</i>		
<i>d. Competently discuss regulatory issues (eg, notifying state/federal health officials of reportable disease); public health issues (eg, zoonotic potential); food safety/slaughter for food issues (eg, withdrawal times)</i>		
<b>Communication:</b> <b>Candidate is assessed based upon their ability to:</b>	<b>5</b>	
<i>a. Communicate clearly and effectively using language that might be readily understood by a client</i>		
<i>b. Answer all questions correctly and appropriately</i>		
<b>TOTAL POINTS</b>	<b>100</b>	

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**Station Three—Clinical Procedures****Overview of Station Three—**

**Part A:** The candidate will perform the following procedures in order on a lactating cow:

1. Obtain a milk sample from each quarter, perform a California Mastitis Test (CMT) on the samples, and interpret the test results.
2. Prepare the udder and obtain a milk sample for bacterial culture; interpret bacterial culture results provided and communicate a therapeutic/management plan for the dairyman based upon the culture results.
3. Place a halter on the cow and restrain the cow in a manner that would allow procedures to be performed safely on the head or neck.

(Note—See also example FAP03 assessment sheet on the following pages)

**Part B:** The candidate will perform a total of five (5) procedures from the following list on an adult cow. One (1) of those procedures will be randomly chosen from skills 1-2, one (1) of those procedures will be randomly chosen from skills 3-4, and three (3) of those procedures will be randomly chosen from skills 5-13.

1. Place a mouth gag and perform an examination of the oral cavity.
2. Pass a stomach tube, ensure it is placed correctly, and collect rumen fluid.
3. Select an appropriate vacutainer for a specified laboratory test and collect a blood sample by coccygeal venipuncture.
4. Manually collect urine sample, describe the sample, perform a gross assessment and a dipstick test, and interpret the results. Discuss the limitations of dipstick test.
5. Percuss and auscultate a cow to determine the presence of absence of a rumen gas cap, left displaced abomasum, pneumoperitoneum, pneumocolon, and right displaced abomasum. Discuss how these conditions are differentiated from each other.
6. Describe how to place and secure an intravenous catheter into the jugular vein for long-term use. Candidate should select all materials and equipment; identify the landmarks/site of catheterization; prepare the site of catheterization; describe the position and placement of the catheter, and describe how the catheter would be secured.
7. Describe how to perform a caudal epidural injection. Candidate should select all materials and equipment; draw up the correct amount of local anesthetic; identify the landmarks/site of injection; prepare the site of injection; and describe the position and placement of the needle.
8. Describe how to restrain and examine a hind foot for suspected foot lameness.
9. Perform a speculum examination of the cervix.
10. Describe in detail how and where to inject 30ml of an antibiotic solution for both subcutaneous and intramuscular routes.
11. Describe how to perform a cornual nerve block. Candidate should select all materials and equipment; draw up the correct amount of local anesthetic; identify the landmarks/site of injection; prepare the site of injection; and describe the position and placement of the needle.
12. Describe how to perform paravertebral anesthesia. Candidate should select all materials and equipment; draw up the correct amount of local anesthetic; identify the landmarks/sites of injection; prepare the site of injection; and describe the position and placement of the needle.
13. Administer oral medication to the cow.

**Standard Script for Station Three**—Prior to beginning this station, the examiner should read the following script (in quotes) to each candidate. The time should not begin until all of the instructions have been given.

“In front of you is a mature, lactating dairy cow that will be used for both Part A and Part B of this Procedures Station. In Part A, you need to complete the following 3 skills in order listed:

- 1) Obtain a milk sample from each quarter, perform a California Mastitis Test on the samples, and interpret the test results.
- 2) Obtain a milk sample for bacterial culture. I will then provide bacterial culture results. Based on your interpretation of the results, you will have to communicate a therapeutic and management plan for the dairyman.
- 3) Place a halter on the cow and restrain her in a manner that would allow procedures to be performed on the head and neck.

A list of these skills will be available for you to refer to as you proceed through this station.”

“In Part B, I would like you to perform 5 procedures printed on these index cards for your reference.”

“As you perform all of these skills, you must explain to me what you are doing. You will have 45 minutes to complete both Part A and Part B, so plan accordingly. In front of you is a clock [*and/or timer*] for your use to manage your own time.”

**Assessment Sheet for Food Animal Practice—Station 3 (FAP03)**

*Note—If any procedure is causing unreasonable discomfort or danger to the animal, the examiner will intervene, may terminate the procedure, and will assign a penalty, which will be reflected in the number of points assigned to the particular skill.*

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<b>FAP03 ASSESSMENT, Clinical Procedures</b>		
<b>Candidate Name/ID:</b>	<b>Date/Session/Site:</b>	
<i>Activity/Skill</i>	<b>Max Pts</b>	<b>Candidate Score</b>
<b>PART A</b> Candidate is scored on ability to correctly and efficiently:	<b>35</b>	
a. Obtain a milk sample from each quarter, perform a California Mastitis Test (CMT) on the samples, and interpret the test results.		
b. Prepare the udder and obtain a milk sample for bacterial culture; interpret bacterial culture results provided and communicate a therapeutic/management plan for the dairyman based upon the culture results.		
c. Place a halter on the cow and restrain the cow in a manner that would allow procedures to be performed safely on the head and neck		

<b>PART B</b> Candidate is scored on ability to correctly and efficiently perform 5 of the following 13 skills: <i>NOTE: Candidates will perform one skill chosen from skills 1-2 and one skill from 3-4. Three skills will be chosen from 5-13</i>	<b>65</b>	
i. Place a mouth gag and perform an examination of the oral cavity (w/ or w/out gag) – visual assessment & discussion of lesions present (if any)		
ii. Pass a stomach tube, ensure it is placed correctly, extraction of tube, discuss collect rumen fluid		
iii. Select an appropriate vacutainer for a specified laboratory test and collect a blood sample by coccygeal venipuncture		
iv. Manually collect urine sample. Describe the sample, perform a dipstick test and interpret the result. Discuss the limitations of the dipstick test. Note: Points will not be deducted if use of correct procedure does not yield a urine sample; examiner to supply urine sample in this case.		

*FAP03 continued on next page*



FAP03 ASSESSMENT, Clinical Procedures		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	Max Pts	Candidate Score
<b>PART B (continued)</b>		
<i>NOTE: Candidates will perform 3 skills to be chosen from v – xiii</i>		
v. Percuss and auscultate this cow to determine the presence or absence of each of the following: LDA, rumen gas cap, pneumoperitoneum, pneumocolon, and RDA. Discuss how to differentiate between the above conditions		
vi. Select an appropriate catheter for use long-term use in the jugular vein; describe how to place, secure and maintain the catheter.		
vii. Describe how to perform a caudal epidural injection for the purposes of analgesia during obstetrical manipulations		
viii. Describe how to examine a hind foot for suspected foot lameness		
ix. Perform a speculum examination to evaluate cervix and describe findings		
x. Describe in detail how and where to inject 30ml of an antibiotic solution for both subcutaneous and intramuscular routes		
xi. Describe how to perform a cornual nerve block		
xii. Describe how to perform paravertebral anesthesia		
xiii. Administer oral medication to the cow		
<b>TOTAL POINTS</b>	<b>100</b>	

**Station Four—Bovine theriogenology and public health, food safety, and regulatory issues****Overview of Station Four—**

**Part A:** The examiner will act as a client with an adult female cow presented for a check of her reproductive status. The candidate should:

- **perform** a rectal examination\*
- **determine** if the cow is pregnant
- **explain** what that determination was based upon
- **discuss** what effect prostaglandin administration would have on the cow's reproductive status.

\*The actual rectal examination must be completed within 3 minutes. The examiner will stop the rectal examination at 3 minutes if the candidate has not completed the examination.

(See also FAP04 assessment sheet on the following pages)

**Part B:** The candidate will be presented with an “obstetric box” model in which the fetus has been placed in an abnormal position commonly associated with dystocia in cows. The candidate should:

- **ask** the examiner/client questions to solicit any necessary additional history and physical finding (eg, straining, etc)
- **describe** how to prepare the cow for obstetrical examination
- **describe** the malpresentation, -position, or -posture of the fetus, using standard terminology
- **perform** the necessary manipulation on the fetus in the obstetric box in order to facilitate vaginal delivery
- **place** chains on the fetus in the obstetric box to facilitate delivery
- **discuss** how to determine whether vaginal delivery is possible in a calf with dystocia
- **describe** possible alternatives to vaginal delivery.

(See also FAP04 assessment sheet on the following pages)

**Part C:** Using the FAP05 assessment sheet, the candidate will **list** five (5) of the drugs currently (ie, 1 week prior to examination date) prohibited for extralabel use in food animals in the United States or Canada (answer for the country in which examination is taking place).

(Note—See also example FAP05 assessment sheet on the following pages)

**Standard Script for Station Four, part A—**Prior to beginning part A of this station, the examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. The time should not begin until all of the instructions have been given.

“This station will consist of three parts. In front of you is a sexually mature cow. This cow will be used only for Part A. Over there is an obstetric box with a bovine fetus placed inside; this will be used for Part B. Part C will require you to write an answer to a single question; writing material is available over there. You will have a total of 45 minutes to complete this entire

station, but Part A must be completed within 10 minutes. Moreover, for humane reasons, the actual rectal examination must be completed within 3 minutes. If you have not completed the rectal examination in 3 minutes, I will stop that portion of Part A, and you may complete the other portion. If you have not completed all skills in Part A in 10 minutes, I will stop this portion of the examination and ask you to move on.

In Part A, I would like you to perform a rectal examination on this sexually mature cow, determine if she is pregnant, explain to me on what basis that determination was made, and discuss with me the response of this cow's reproductive tract to a therapeutic dose of prostaglandin. Please proceed with Part A. When you have completed this part, we will move over to the obstetric box, and I will provide instructions for Parts B and C."

**Standard Script for Station Four, parts B and C**—Prior to beginning parts B and C of this station, the examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. The time should not begin until all of the instructions have been given.

"You will have a total of 35 minutes to complete the next two parts of this station, so please plan accordingly. In Part B, we will be using this obstetric box to simulate a pregnant cow that has been in labor for some hours. Consider yourself the veterinarian and I will be the client. I will provide you with the presenting complaint, and you will solicit any necessary additional history and physical findings (for example, signs of straining, etc) from me. You will then describe how to prepare a cow for obstetrical examination. Next, you will examine the fetus inside this obstetric box and describe the malpresentation, -position, or -posture, using standard terminology. You will perform the necessary manipulation on this fetus in order to facilitate vaginal delivery, including placing chains or ropes. However, you are not required to—nor will you be assessed on—pulling the fetus from the obstetric box. Finally, you will discuss with me possible alternatives to vaginal delivery for this case, and communicate to me, the client, post-delivery cow and calf (if appropriate) care.

For Part C, you will need to answer a single question regarding a list of drugs prohibited by Federal law for extra-label use in food animals in the United States OR Canada (answer for the country in which you are currently sitting this examination). You may proceed now with either Part B or Part C, but remember you have 35 minutes to complete both parts."

**Assessment Sheets for Food Animal Practice—Station 4 (FAP04/FAP05)**

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<b>FAP04 ASSESSMENT, Bovine Theriogenology</b>		
<b>Candidate Name/ID:</b>	<b>Date/Session/Site:</b>	
<i>Activity/Skill</i>	<b>Max Pts</b>	<b>Candidate Score</b>
<b>PART A</b> <i>Points will be deducted if candidate does not complete the actual rectal examination within 3minutes or the entire Part A within 10 minutes.</i>  Candidate is scored on ability to correctly and efficiently:	<b>40</b>	
<i>a. Perform rectal examination and determine pregnancy status</i>		
<i>b. Explain on what basis pregnancy status determination was made</i>		
<i>c. On the basis of the rectal examination, describe the response to prostaglandin administration, including the basis on which that determination was made (eg, ovarian structures), and discuss sequela to prostaglandin administration.</i>  Note: Full points will only be awarded for describing the response to prostaglandin for correct rectal palpation findings. Points will be deducted from the total score for describing a correct response to prostaglandin administration which is based upon an incorrect determination of the cow's reproductive status.		

<b>PART B</b>	<b>60</b>	
Candidate is scored on ability to correctly and efficiently:		
<i>a. Elicit any additional necessary information from the client (examiner)</i>		
<i>b. Describe how to perform an obstetrical examination, including preparation of animal and self</i>		
<i>c. Identify malpresentation, -posture, -position</i>		
<i>d. Correct malpresentation, -posture, -position</i>		
<i>e. Place chains/ropes</i>		
<i>f. Discuss alternative delivery plans</i>		
<i>g. Communicate to client/examiner post-delivery cow and calf care</i>		
<b>TOTAL POINTS</b>	<b>100</b>	

<b>FAP05 ASSESSMENT, Public Health, Food Safety, and Regulatory</b>		
<b>Candidate Name/ID:</b>	<b>Date/Session/Site:</b>	
<i>Activity/Skill</i>	<b>Max Pts</b>	<b>Candidate Score</b>
<b>PART C</b> <i>Candidate must list 5 of the currently prohibited drugs (ie, 1-week prior to examination date) to receive credit. If candidate does not list 5 of the currently prohibited drugs, or lists nonprohibited drugs, points will be deducted</i>  Candidate is scored on ability to correctly:	<b>100</b>	
<b>List 5 drugs prohibited for extralabel use in food animals in the United States or Canada.</b>		
<b>TOTAL POINTS</b>	<b>100</b>	

## Food Animal Practice Summary Score Sheet

<b>FAP06 SCORE SHEET (Food Animal Practice Section Summary and Final Score Sheet)</b>			
<b>Candidate Name/ID:</b>		<b>CPE Site/Date/Session:</b>	
<b>STATION (area)</b>	<b>Raw Points Awarded</b>	<b>Weighting</b>	<b>Weighted Points Awarded</b>
<b>STATION 1: Clinical Case, Bovine</b> Total points from FAP01 Assessment		30%	
<b>STATION 2: Clinical Case, Other Food Animal</b> Total points from FAP02 Assessment		30%	
<b>STATION 3: Clinical Procedures</b> Total points from FAP03 Assessment		20%	
<b>STATION 4; Parts A&amp;B Bovine Theriogenology</b> Total points from FAP04Assessment		15%	
<b>STATION 4; Part C: Public Health, Food Safety, and Regulatory</b> Total points from FAP05 Assessment		5%	
<b>FINAL SCORE (60 weighted points required to pass)</b>		<b>100%</b>	

**Food Animal Practice Appendices*****Appendix 1—Candidate Worksheet—Food Animal Practice (Stations 1 & 2)***

Each site should determine whether the candidate will record his/her findings while discussing findings with the examiner OR whether the candidate will simply discuss findings with the examiner, with the examiner recording the findings. If the former, examiners may make this or a similar form available to each candidate to allow the candidate to write notes regarding his/her findings during the clinical case stations. If the latter, the examiner may use this or a similar form to record the candidate's findings. If these worksheets are used by the candidate or the examiner, they must be maintained as part of the permanent record of the examination. But please indicate who filled out the form.

**Candidate Name/ID:**

**CPE Site/Date/Session:**

**Who filled out Appendix 1? (Please choose one): Examiner \_\_\_\_\_ OR Candidate \_\_\_\_\_**

1. Develop problem list, based on history and physical examination findings:
  
  
  
  
  
  
  
  
  
  
2. Develop differential diagnoses list, based on history and physical examination findings:
  
  
  
  
  
  
  
  
  
  
3. Arrive at the most likely diagnosis, based on history and physical examination findings:

*(Appendix 1 continued on next page)*



***Appendix 1 (continued)—Candidate Worksheet—Food Animal Practice (Stations 1 and 2)***

**Page 2**

**Candidate Name/ID:**

**CPE Site/Date/Session:**

4. Develop an appropriate diagnostic plan that will aid in identification of the correct diagnosis:

5. Laboratory/other tests requested:

6. Interpretation of available test results:

*(Appendix 1 continued on next page)*

## Page 3

**CPE Site/Date/Session:**

7. Most likely diagnosis based on history, physical examination and all diagnostic results at hand:
8. Develop therapeutic plan (may include the following: individual animal treatment, herd treatment, prognosis, public health issues, regulatory concerns, food safety concerns):
9. Develop treatment/discharge/follow-up instructions to client:

**Appendix 2—Candidate Answer Sheet—Food Animal Practice Station 4, Part C**

**CANDIDATE ANSWER SHEET—Food Animal Practice Section, Station 4, Part C**

**Public Health, Food Safety, and Regulatory**

**Candidate Name/ID:**

**Date/Session/Site:**

**List 5 drugs prohibited for extralabel use in food animals in the United States (if taking the CPE in the USA) or Canada (if taking the CPE in Canada)**

1.

2.

3.

4.

5.

**Candidate Signature:**

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## NECROPSY

### Competencies

The Necropsy section is a single-station Section that will assess the candidate's ability to:

- perform a necropsy in an orderly manner, including using appropriate instruments safely and adeptly and disposal of all sharps
- dissect the heart under direct observation of an examiner
- describe findings as normal or abnormal in writing, and if abnormal, briefly listing what the abnormality(ies) is (are), using the Necropsy Report Form provided as Appendix 2 to this section of the MOA
- take tissue samples for histopathology; and remove the head for rabies testing.

### Time

Maximum time: 90 minutes for the actual necropsy plus an additional 15 minutes to complete the Necropsy Report Form (total of 105 minutes [1 hour and 45 minutes]). The Necropsy Report Form can be filled out as the candidate is performing the necropsy; however, the necropsy itself must be completed within 90 minutes. This means candidates will be told to stop the necropsy and set down all instruments at 90 minutes. An additional 15 minutes can then be used to complete the Necropsy Report Form. Candidates are responsible for their own time management.

### Set-up Information

1. Candidates must provide the following supplies:
  - a. Clean laboratory coat.
2. The following supplies/information will be provided by the examining site:
  - a. Facilities and instruments to perform a necropsy similar to what would be present in veterinary practice (eg, knives, scissors, bone cutters, etc).
  - b. Supplies required for collecting tissue specimens, to include marking pens and labels.
  - c. Clipboard or other writing surface, Necropsy Report Form for documenting findings (Appendix 2), writing utensils (pens/pencils).
  - d. Coveralls, boots, and gloves.
  - e. Safety equipment (gloves, aprons, goggles, etc).
3. Animal Requirements—Animal carcass (1 per candidate, carcass to be 45 kg or less in weight and selected from porcine, canine, feline, bovine, equine, caprine, or ovine animals).
4. People Requirements—Minimum requirement: 1 veterinary examiner per 3 candidates and 1 technical assistant or veterinary technician per 5 candidates.
5. Facilities and Equipment
  - a. 1 room/area suitable for conducting necropsies.
  - b. Timing device visible from each station to track examination time. Whenever possible, timers will be of the “count-down” variety to allow candidates and examiners alike to clearly see time remaining in station or section.

### General Requirements of the Candidate

Candidates are expected to conduct the necropsy in a safe, orderly, and sanitary manner. Candidates should report any self-injury promptly to the examiner. Accidental self-injury does not necessarily result in automatic failure of the necropsy section, and it is important that any injury be treated in a timely manner. Time taken to treat the injury will not be counted against the candidate's maximum time allotted for this section (ie, the clock will be stopped to attend to the injury). If, in the opinion of the examiner, the candidate is performing the necropsy in a haphazard way or does something that is unsafe and of serious danger to him/her or other personnel, the examiner may assess penalties ranging from a reduction in the NEC01 score to termination of the NEC Section and dismissal of the candidate with a "zero" for Necropsy.

Examples of "fatal flaws" that might result in termination of the Necropsy section include, but are not limited to:

- Using a knife in an inappropriate manner that is very unsafe.
- Lack of adeptness in using instruments that is apparent at multiple areas of the necropsy.

Please also refer to Appendix 1 and the NEC01 Assessment sheet.

### Overview of Necropsy Section

The candidate will be given an animal carcass (100 pounds [45 kg] or less in weight and selected from porcine, canine, feline, bovine, equine, caprine or ovine animals) and an appropriate environment for conducting a necropsy. The candidate must **perform** a complete necropsy by completing the following tasks:

- Thoroughly examine an intact carcass, documenting body condition
- Open carcass, examine major cavities, remove viscera
- Examine major organs, to include palpating lungs for inflation and, with an examiner observing, identifying specified cardiac structures (chambers, aorta, vena cava, pulmonic trunk, valves, and myocardium)
- Examine muscles and joints (at least one each from a hind and fore limb)
- Examine endocrine glands and lymph nodes
- Remove the animals' head at the atlanto-occipital joint as if to submit for rabies examination

During the necropsy, the candidate must document, in writing on the Necropsy Report Form (Appendix 2) provided, whether the organs and tissues examined have any abnormalities. If the candidate assesses an organ or tissue as abnormal, the candidate must briefly list the change(s) observed (eg, if spleen is larger than normal, the candidate should simply state either splenomegaly or enlarged spleen). The completed Necropsy Report Form will remain part of the candidate's record of examination and will be assessed after completion of this section.

In addition, the candidate must take and preserve a tissue section of the appropriate size/ thickness from each of the following organs for histopathology and document, on the Necropsy Report Form, whether the section was taken from a normal or abnormal organ. All tissues are to be collected in one container. Fixative or fixative substitute will be provided, and candidates will need to add the appropriate volume of fixative for amount of tissue collected.

- a. Heart
- b. Lung
- c. Liver
- d. Small intestine
- e. Colon

- f. Stomach
- g. Spleen
- h. Pancreas
- i. Kidney
- j. Skeletal muscle
- k. Thyroid gland
- l. Adrenal gland
- m. Internal lymph node
- n. Peripheral lymph node

### **Standard Script for Necropsy Section**

The examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. Time does not begin until all instructions have been given.

“You will have a total of 105 minutes to complete this section. You will have 90 minutes to perform a necropsy on the animal in front of you. You are responsible for monitoring your own time. An assortment of instruments and equipment to perform the necropsy, and a container to put samples in, are at your station. You should thoroughly examine the intact carcass; open the carcass and examine the major cavities; remove the viscera; and examine the major organs, muscles, joints, endocrine glands, and lymph nodes. At any time during the exam, you may describe to the examiner what organ or tissue you are looking at and observing. You will also be required to remove the animal’s head. You are not required to open the skull. You should collect tissue samples for histopathology of the organs and structures identified on page 3 of the Necropsy Report Form. Before placing the samples in fixative, you should place each specimen to allow the examiner to assess each specimen.

Before dissecting the heart, please call an examiner so that the examiner may observe as you identify and examine the following structures:

- Chambers – right & left atrium, right & left ventricle
- Aorta
- Vena cava
- Pulmonic trunk
- Valves – aortic, pulmonic, mitral, tricuspid
- Myocardium

If an examiner is not immediately available, please do not begin dissection of the heart but, instead, continue with the next step of your necropsy.

You must perform the necropsy in an orderly manner, using the appropriate instruments in a safe manner. If the examiner is concerned that you are using an instrument or equipment in an unsafe manner, he/she may notify you and you will need to correct yourself. Your score may also be negatively impacted. If you injure yourself, please report that promptly to the examiner. Accidental self-injury does not necessarily result in automatic failure of the necropsy section, and it is important that any injury be treated in a timely manner. Time taken to treat the injury will not be counted against the maximum time allotted for this section; that is, we will stop the clock to attend to any injury. Additionally, you must dispose of all sharps properly at the completion of your exam.

Following the completion of the necropsy, you will be given an additional 15 minutes to document in writing on the Necropsy Report Form whether the organs and tissues you examine have any abnormalities. If you note any abnormality, you should provide a brief description of the abnormality. For example, if you believe the liver is larger than normal, you should simply write “hepatomegaly” or “enlarged liver.”

You may choose to begin filling out the Necropsy Report Form while doing the necropsy, but please remember, you will be required to stop the necropsy and set down your instruments at 90 minutes. You will then have what time is remaining out of the 105 minutes to complete your Necropsy Report Form. Please make sure your name and candidate ID are on all pages of the Necropsy Report Form and leave your completed form on your table when you are done.

As you perform the necropsy, the examiner(s) will be making notes. Please do not let the examiners’ writing affect your performance at any time during the Necropsy. Also, please be aware that an examiner may nod or state “OK” to let you know that he has heard or seen you; however, these do not mean the examiner is in agreement with what you have said or done. Also, examiners cannot offer feedback on your performance during or after the examination.

You must monitor your time remaining to ensure that you complete the Necropsy itself within a time limit of 90 minutes. You may use any time remaining up to the 105 minutes for the section to complete your Necropsy Report.”

### **Assessment Sheet for Necropsy (NEC01)**



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NEC01 ASSESSMENT, Necropsy		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	Max Pts	Candidate Score
<b>Perform a complete necropsy.</b> Candidates will be assessed on their ability to accurately, effectively and efficiently perform a complete necropsy as outlined on this assessment sheet	<b>92</b>	
<i>a. Thoroughly examines intact carcass, to include:</i>		
i. assessing general body condition (nutritional status, muscle mass) and hydration (palpates body, head)		
ii. examining skin/hair coat (dorsum/ventrum, etc)		
iii. examining head (eyes, ears, lips, oral cavity, external nares)		
iv. examining limbs (visual evaluation, palpation, flexion of joints) including feet (pads, toenails, hooves, etc, depending on species)		
v. examining perianal and genital region and mammary gland		
vi. documenting on the Necropsy Report Form the body condition and what, if any, abnormalities were found during the examination of the intact carcass		
<i>b. Opens carcass, examines major cavities, remove viscera and head, to include:</i>		
i. opening carcass efficiently and in an orderly manner, using instruments appropriately; evaluation of thoracic negative pressure; examining viscera in situ in both body cavities		
ii. documenting on the Necropsy Report Form what, if any, abnormalities were found during the examination of the viscera in situ		
iii. removing viscera in an orderly and adept manner		
iv. removing head in an adept manner, using appropriate instruments safely		

*NEC01 continued on next page*

NEC01 ASSESSMENT, Necropsy		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	Max Pts	Candidate Score
<i>c. Examines major organs in a systematic manner, which includes:</i>		
i. examining heart; opening chambers and identifying the left & right atria and left & right ventricles, aorta, vena cava, pulmonic trunk; exposing and examining the aortic, pulmonic, mitral and tricuspid valves; examining myocardium		
ii. opening larynx, esophagus, trachea and mainstem bronchi; sectioning lung and inspecting & palpating the lung for inflation status		
iii. examining liver and gallbladder checking bile duct patency into duodenum; opening gallbladder; sectioning and inspecting at least 2 areas of the liver		
iv. examining stomach and intestines; inspecting omentum; opening and inspecting stomach; opening and inspecting representative levels of small intestine (duodenum, jejunum, and ileum) and colon; incising and inspecting pancreas		
v. examining urogenital tract; sectioning kidneys and following ureters if indicated; stripping renal capsule; opening bladder; examining reproductive tract; incising and inspecting testes or ovaries if animal is sexually intact		
vi. examining spleen (palpates and sections)		
vii. documenting on the Necropsy Report Form what, if any, abnormalities were found during the examination of the major organs, to include stating the inflation status of the lungs and whether the animal is sexually intact or neutered		

NEC01 continued on next page

NEC01 ASSESSMENT, Necropsy		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	Max Pts	Candidate Score
<i>d. Examines muscles and joints (at least one each from a hind and fore limb), to include:</i>		
i. completely opening at least two joints; inspecting joint surfaces and synovial membranes; using instruments in a safe and appropriate manner		
ii. incising and inspecting two or more major muscles; using instruments in a safe and appropriate manner		
iii. documenting on the Necropsy Report Form what, if any, abnormalities were found during the examination of the above muscles and joints.		
<i>e. Examines endocrine glands, lymph nodes, to include:</i>		
i. locating and inspecting thyroid glands		
ii. locating and inspecting adrenal glands		
iii. locating and inspecting lymph nodes (both peripheral and internal		
iv. documenting on the Necropsy Report Form what, if any, abnormalities were found during the examination of the above endocrine glands/lymph nodes		

<i>f. Overall approach to necropsy</i>		
<b>Collect tissue specimens for histopathology.</b> Candidates will be assessed on collecting a complete tissue sample, with all relevant structures, in an appropriate manner and of appropriate representative shape and thickness.	<b>8</b>	
a. Heart		
i. tissue of appropriate size, shape and thickness for diagnostic purposes		
b. Lung		
i. tissue of appropriate size, shape, and thickness for diagnostic purposes		
c. Liver		
i. tissue of appropriate size, shape, and thickness for diagnostic purposes		
d. Small intestine		
i. tissue of appropriate size, shape, and thickness for diagnostic purposes		
e. Colon		
i. tissue of appropriate size, shape, and thickness for diagnostic purposes		
f. Stomach		
i. tissue of appropriate size, shape, and thickness for diagnostic purposes		
g. Spleen		
i. tissue of appropriate size, shape, and thickness for diagnostic purposes		

NEC01 continued on next page

NEC01 ASSESSMENT, Necropsy		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	Max Pts	Candidate Score
<b>Collect tissue specimens for histopathology</b> (continued from previous page)		
h. Pancreas i. tissue of appropriate size, shape, and thickness for diagnostic purposes		
i. Skeletal muscle i. tissue of appropriate size, shape, and thickness for diagnostic purposes		
j. Kidney i. tissue of appropriate size, shape, and thickness for diagnostic purposes		
k. Thyroid gland i. tissue of sufficient quality for diagnostic purposes		
l. Adrenal gland i. tissue of sufficient quality for diagnostic purposes		
m. Internal lymph node i. tissue of appropriate size, shape, and thickness for diagnostic purposes		
n. Peripheral lymph node i. tissue of appropriate size, shape, and thickness for diagnostic purposes		
o. Appropriate volume of fixative for tissue		

<b>TOTAL POINTS</b> for performing necropsy (92 maximum points possible) and collecting tissue specimens (8 maximum points possible)	<b>100</b>	
<b>Candidates are also assessed on their ability to:</b>	<b>Yes</b>	<b>No</b>
Use appropriate instruments in an appropriate and safe manner.		
<b>Final Score</b> (indicate <b>PASS</b> or <b>FAIL</b> in the cell to the right): A total score of 60 points or more plus a “yes” assessment on the above skill are required to pass the Necropsy Section.		

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**Necropsy Appendices*****Appendix 1—Fatal Flaw List***

These are failing behaviors that potentially put the candidate or examination personnel in danger. All are behaviors that may require examiner intervention and will result in a failing grade for the candidate and dismissal from this section of the CPE.

The examiner will stop the Necropsy Section immediately if any one behavior from the following fatal flaw list is observed (ie, recognized by the examiner and confirmed by another examiner or veterinary technician):

1. Candidate fails to practice safe handling of sharp instruments; such as cutting tissue samples while holding them in the palm of the candidate's hand leading to potential laceration, or placing an exposed blade in a place where it could accidentally lacerate someone or fall and stab someone.
2. Candidate does not dispose of sharps in the correctly designated area (ie, a sharps container).
3. Consistently uses instruments inappropriately, resulting in excessive tissue damage.
4. Candidate fails to protect him-/herself from possible exposure to zoonotic organisms (eg, not wearing the correct protective clothing/equipment, including not wearing gloves or appropriate eye protection while handling tissues, touching ones mucous membranes with unwashed hands).
5. Candidate exhibits any other behavior that would put him-/herself or other exam personnel at risk. The examiner must document the behavior.
6. Candidate refuses to perform any of the required skills listed.

## Appendix 2—Necropsy Report Form

<b>NECROPSY REPORT FORM (page ONE)</b> <b>Candidate Name/ID: Date/Session/Site:</b>  <b><u>Animal provided for Necropsy</u> Degree of Autolysis (circle one): Mild Moderate Severe</b>  <b>Species _____ Breed _____ Age _____ Weight _____</b>		
<b><u>Each Candidate to Complete All Information Below and On Following Pages</u></b>  <b>Sex of animal _____ Neutered Yes / No Body Condition of animal _____</b>		
Organ System or Structure	Is the organ system/structure <b><u>abnormal?</u></b> (Circle Y for yes or N for no)	If <b><u>yes</u></b> , please briefly list abnormalities.
Intact Carcass in general	Y / N	
Skin (eg, including hair, external body orifices and subcutis)	Y / N	
Thoracic and Abdominal Viscera, examined in situ	Y / N	
Cardiovascular System (eg, myocardium, pericardium, endocardium, valves, blood vessels)	Y / N	
Respiratory System (eg, nasal cavity, larynx, trachea, bronchi, lungs, pleura)	Y / N	
Digestive System (eg, oral cavity, teeth, tongue, salivary glands, tonsils, pharynx, esophagus, stomach, small and large intestine, liver, pancreas, peritoneal cavity)	Y / N	
Additional comments/remarks regarding above organ systems:    		

Appendix 2: Necropsy Report Form continued on next page



**NECROPSY REPORT FORM (page TWO)****Candidate Name/ID: Date/Session/Site:**

<b>Organ System</b>	<b>Is the organ system abnormal? (Circle Y for yes or N for no)</b>	<b>If yes, please briefly list abnormalities.</b>
Urogenital System (eg, kidneys, ureters, bladder, urethra, ovaries, uterus, vagina, vasa deferentia, seminal vesicles, prostate, penis, prepuce)	<b>Y / N</b>	
Hematopoietic System (eg, spleen, lymph nodes)	<b>Y / N</b>	
Musculoskeletal System (eg, muscles, bones, joints):	<b>Y / N</b>	
Endocrine System (eg, thyroids, parathyroids, thymus, adrenals):	<b>Y / N</b>	

Additional comments/remarks regarding above organ systems:

*Appendix 2: Necropsy Report Form continued on next page*

<b>NECROPSY REPORT FORM (page THREE)</b>		
<b>Candidate Name/ID: Date/Session/Site:</b>		
<b>Sample collection for histopathology</b>	<b>Is the tissue abnormal?</b>	<b>If yes, please briefly list abnormalities.</b>
Heart	Y / N	
Lung	Y / N	
Liver	Y / N	
Small intestine	Y / N	
Colon	Y / N	
Stomach	Y / N	
Spleen	Y / N	
Pancreas	Y / N	
Kidney	Y / N	
Skeletal muscle	Y / N	
Thyroid gland	Y / N	
Adrenal gland	Y / N	
Internal lymph node	Y / N	
Peripheral lymph node	Y / N	

Candidate Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## RADIOGRAPHIC POSITIONING

### Competencies

The Radiographic Positioning section is a single-station section that will assess the candidate's ability to:

- determine anatomical structures and views necessary to radiographically diagnose a clinical condition and produce diagnostic quality radiographic images of those structures

### Time

Maximum time, 45 minutes

### Set-up Information

1. Animal Requirements—Canine animal of mild temperament (sedated or anesthetized if necessary).
2. People Requirements—1 veterinary examiner per candidate and 1 technical assistant or veterinary technician per candidate
3. Facilities and Equipment
  - a. X-ray room/area with conventional or digital radiographic equipment.
  - b. Timing device visible from each station to track examination time. Please note that when possible, timers will be of the “count-down” variety to allow candidates and examiners alike to clearly see time remaining in station or section.
4. Supplies/Information Provided By The Examiner
  - a. Radiographic film and automated film processing equipment (not operated by candidates) OR digital radiographic equipment.
  - b. Accessories and supplies for preparing radiographs.
  - c. Safety equipment (gloves, aprons, goggles, etc).
5. Supplies Provided By The Candidate
  - a. Clean laboratory coat.
  - b. Pens/pencils
  - c. Dosimeter (optional; if the candidate wishes to monitor personal levels of radiation during the examination, the candidate will provide his/her own dosimeter).

### General Requirements of the Candidate

Candidates are expected to handle all animals in a humane and safe manner. If, in the opinion of the examiner, the candidate does not handle the animal humanely or handles the animal in a manner that is unsafe to him/herself or other personnel, the examiner may assess penalties ranging from a reduction in score to termination of the exam and dismissal of the candidate with a failure for the section.

**All activities must be completed with the candidate practicing radiation safety.** Failure to use appropriate radiation safety precautions including, but not limited to, failure to use mechanical restraint if necessary (leg ties, wedges, etc) and protective gear or shielding behind a protective wall that results in exposing the candidate, the patient, the technician, the staff, or the examiner to risk is considered a fatal flaw and the candidate will be dismissed from this station and receive no points for the station.

Please also refer to the RAD01 Assessment sheet.

### Overview of Radiographic Positioning Section

**Part A:** The candidate will be given a sedated or anesthetized canine animal, and an x-ray machine (either digital or conventional), and all appropriate accessories. The candidate will be provided with a suspected diagnosis for the animal, and the candidate will **position** the animal using leg ties, wedges, etc., in order to produce appropriate diagnostic quality radiographic images to confirm or rule out the suspected diagnosis. The image(s) produced must be the appropriate views of the appropriate anatomic structures/region and be of diagnostic quality.

**Part B:** Given a digital or conventional x-ray machine (KVP, Ma, time settings) and a radiographic technique chart specific for that machine, the candidate will **determine** the required settings for the above exposures, **set** the machine, **employ** radiation safety measures and **take** the required exposures to obtain appropriate diagnostic quality radiographs. The candidate will be allowed to evaluate the quality of each initial radiographic image and allowed to repeat each image only one time, if desired by candidate. In any situation where images are repeated, the candidate is then allowed to designate which of the two images should be scored.

(Note—A veterinary examiner will assess each candidate's ability to position an animal and take diagnostic quality radiographs)

(Note—See also RAD01 assessment sheet on the following pages)

**Standard Script for Radiographic Positioning Section**

The examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. Time does not begin until all instructions have been given.

“You will be presented with a dog with a suspected diagnosis of \_\_\_\_\_ (Site to insert a fictitious suspected diagnosis which will then allow evaluation of the candidate’s ability to determine appropriate structures / region to radiograph and appropriate views). You are to determine the appropriate structures or anatomical region to image and the appropriate views to take in order to confirm or rule out the suspected diagnosis. The dog will be sedated or under general anesthesia. Using mechanical restraint only (ties, wedges, sandbags, tape, etc), you are to position the animal appropriately, set the radiographic unit, and make diagnostic images. It will be necessary to take at least two different radiographs to provide the best chance for diagnosis for the structure/region in question.

You are not responsible for processing the film (where applicable) or inputting data onto the digital image, but you are required to evaluate each film or digital image to determine if it is of diagnostic quality. If you determine that your first radiographic image is not of diagnostic quality (and you have enough time remaining), you may elect to repeat—one time only—each of the two views. If you have taken 2 images of the same view, you should then designate which image should be assessed by the examiner. Only one image of the same view may be submitted for scoring.

You are also responsible for ensuring appropriate radiation safety during this station. Failure to use appropriate radiation safety precautions and exposing yourself, the technician, the staff, the patient or the examiner to unnecessary radiation is considered a fatal flaw and will result in your dismissal from this station and a score of zero for this station.

I am allowed to answer questions only if they relate to aspects of the radiographic unit or associated equipment which I believe you would be unfamiliar. Throughout this station, I will be recording notes pertaining to YOUR BEHAVIOR, both negative AND POSITIVE, and will be assessing you on your ability to effectively and succinctly communicate with ME. Please do not let MY writing affect your performance. You will have 45 minutes to complete this section.”

**Assessment Sheet for Radiographic Positioning (RAD01)**

<b>RAD01 ASSESSMENT, Radiographic Positioning</b>		
<b>Candidate Name/ID:</b>	<b>Date/Session/Site:</b>	
<i>Activity/Skill</i>	<b>Max Pts</b>	<b>Candidate Score</b>
<i>Part A: Candidate is assessed on his/her ability to position patient and use of proper radiographic techniques, including selection of appropriate views and structures/ regions.</i>	<b>40</b>	
<b>Part A—First view:</b>		
<b>Part A—Second view</b>		
<i>Part B: Images designated by candidates are assessed for clarity of the visualization of the area of interest and for evidence of the use of appropriate radiographic techniques:</i>	<b>60</b>	
a. First view		
b. Second view		
<b>Part C: Radiation safety</b>	<b>Used rad. safety</b>	<b>Did not use radiation safety</b>
Failure of the candidate to use appropriate radiation safety (to include but not limited to failure to use mechanical restraint if necessary (leg ties, wedges, etc) and failure to use protective gear or shielding behind protective wall, exposing the candidate, the animal, the technician, the staff, or the examiner to risk is considered a fatal flaw and the candidate will be dismissed from, and receive a score of zero for, this section. If radiation safety precautions are observed, it should be so noted here, but no additional points will be provided.		
<b>TOTAL</b>	<b>100</b>	

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## SMALL ANIMAL MEDICINE

### Competencies

The Small Animal Medicine section will assess the candidate's ability to:

- evaluate a clinical small animal (canine or feline patient) medicine case (Station 1: Clinical Evaluation)
- write medical management plans and a prescription for a selected drug based on a case description of a hospitalized canine or feline patient and orally communicate treatment plans (Station 2: Medical Management)
- describe and/or perform clinical techniques commonly used in small animal veterinary practice (Station 3: Clinical Skills)

### Time

SAM01, SAM02, and SAM03 stations are allotted 45 minutes each. For Station 2 (Medical Management) the 45 minutes will be allotted as follows:

- At 35 minutes, the examiner will ask the candidate if he/she is ready to begin the oral portion of this station.
- If the candidate is NOT READY to begin the oral portion at 35 minutes, the examiner will allow him/her to continue with the written portion but the candidate will need to notify the examiner when he/she is ready to begin the oral portion. If a candidate fails to leave sufficient time to complete the oral portion, his/her scores may be negatively impacted.
- Candidates who are ready for the oral portion prior to 35 minutes may notify the examiner directly and begin the oral portion at that time.

### Set-up Information

1. Animal Requirements
  - a. Canine or feline animal affected by a common clinical condition (Station 1).
  - b. Live animals are not used at Station 2 (Medical Management). A written record of a dog or cat hospitalized with a common clinical condition will be provided. The candidate will be assessed on his/her ability to write an appropriate medical management plan for the patient for the next 12 hours and orally communicate those treatment plans to a veterinary technician.
  - c. Both live animals and models will be used at Station 3 (Clinical Skills)
2. People Requirements
  - a. One veterinary examiner per candidate at Station 1
  - b. One veterinary examiner at Station 2
  - c. One veterinary examiner per candidate at Station 3
3. Facilities and Equipment
  - a. 1 small animal examining room for Station 1.
  - b. 1 room/area for Station 2 with appropriate space to allow for reading and writing of medical records.
  - c. 1 room for Station 3
  - d. Timing device visible from each station to track examination time. Please note that when possible, timers will be of the “count-down” variety to allow candidates and examiners alike to clearly see time remaining in station or section.



4. The Candidate Must Have the Following Supplies:
  - a. Stethoscope, penlight, clean laboratory coat, pen
  - b. Wrist watch with second hand
5. The Following Supplies Will Be Provided By The Examining Site
  - a. Instruments/supplies appropriate for the case and commonly found in examination rooms in a typical US or Canadian veterinary practice (eg, microscope, view box or computer for digital radiographs, otoscope, ophthalmoscope, thermometer).

### **General Requirements of the Candidate**

Candidates are expected to handle all animals in a humane and safe manner. If, in the opinion of the examiner, the candidate does not handle the animal in the Clinical Evaluation Station (SAM01) humanely or handles the animal in a manner that is unsafe to himself/herself or other personnel, the examiner may assess penalties ranging from a reduction in the SAM01 score to termination of the SAM01 station and dismissal of the candidate with a “zero” for SAM01 (i.e., Fatal Flaw).

The station (eg, SAM01, SAM02, or SAM03) will be terminated and the candidate dismissed with a “zero” for the station if, in the professional judgement of the examiner:

- the candidate jeopardizes the health and well-being of the animal patient in SAM01 (Clinical Evaluation) either through action or inaction, **OR**
- in SAM02 (Medical Management), the candidate prescribes a treatment or management plan that, if this were a real patient, would result in serious harm to, or potentially death of, the patient.
- in SAM03 (Clinical Skills), the candidate describes or performs a procedure in such a way that would result in serious harm or potential death to an animal patient, regardless of whether the station is using a live animal or a model.

A candidate that has been dismissed from one Station for the reasons described in the previous paragraphs will fail the entire SAM section but will not be prevented from taking the other stations.

### **Station One—Clinical Evaluation**

#### ***Overview of Station One***

The examiner will act as a client with a dog or cat that is affected with a condition commonly found in veterinary practice. The candidate should:

- question the client/examiner to determine the medical history of the patient
- perform a systematic physical examination
- record the results of the history and physical examination on the provided form (*see Appendix One—Small Animal Medicine*)
- develop an initial problem list, differential diagnoses list, and a diagnostic plan, while explaining his/her reasoning to the examiner, who is acting as a client
- request appropriate and reasonable initial diagnostic tests – examiners will provide test results (along with normal values) if those tests were completed.
- interpret the results of diagnostic tests
- refine the differential diagnoses list based upon the findings and determine the most likely diagnosis, while explaining his/her reasoning to the examiner, who is acting as a client
- develop a therapeutic plan specific for the patient

- develop a prognosis for the patient
- orally communicate all of the above information to the client/examiner

(Note—See also the SAM01 assessment sheet that follows)

To ensure that all examiners at all sites assess the same competencies during this station, a history and physical examination form is available in the MOA as Appendix 1 to the Small Animal Medicine section. Examiners must provide these forms to each candidate, and this form must be used by all candidates to record the history and physical examination findings. Candidates will also need to discuss/describe findings with/to the examiner.

### ***Standard Script for Station One***

The examiner should read the following script (in quotes). The script may be modified to meet specific facility or equipment restrictions at each site. Time does not begin until all instructions have been given.

“I will be acting as a client presenting a patient for your evaluation. You will need to take a complete history from me and perform a complete physical examination of the patient. You will need to explain all normal and abnormal findings to me. I may ask questions that might be expected of a client; you will need to respond appropriately to those questions and will be assessed on your communication abilities.

Please also record your history and physical examination findings on the form provided. Then, communicate an initial problem list, create a list of differential diagnoses for the most relevant problems identified, and develop an initial diagnostic plan. You can request relevant diagnostic tests and you will be provided with results if those tests were performed. At that point, you will need to refine your initial problem and differential diagnoses lists by ruling in or ruling out diagnoses. You may request additional relevant diagnostic exams if necessary. You will also need to tell me what you believe is the most likely diagnosis after which you will need to develop a therapeutic plan. You should also assign an appropriate prognosis for the case. Please note that points will be deducted if you record/describe physical examination findings that are not actually present or if you order tests that are not necessary or are inappropriate for the specific patient.

Please remember to tell me your rationale for the tests you are doing and clinical decisions you are making. Remember, because I am playing the role of the animal owner, I may ask you questions expected of a client.

Throughout this station, I will be assessing you on your ability to perform the skills outlined in the Manual and to communicate effectively. Please do not let my note writing affect your performance as I will be recording positive, as well as negative, observations. If I should nod my head or state “OK,” this only means I have heard a specific explanation or observed a specific performance. It is not a reflection of the assessment. In addition, I may ask questions that a client might ask during the exam to better ascertain where you are in the **process of your diagnostic work-up**.

You will have 45 minutes to complete this station.”

### ***Assessment Sheet for Small Animal Medicine—Station One (SAM01)***

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<b>SAM01 ASSESSMENT, Clinical Evaluation</b>		
<b>Candidate Name/ID:</b>	<b>Date/Session/Site:</b>	
<i>Activity/Skill</i>	<b>MAX POINTS</b>	<b>CANDIDATE SCORE</b>
<b>History taking</b> Candidates will be assessed on their ability to accurately, effectively and efficiently communicate with the client/examiner to elicit a complete history of the patient	<b>15</b>	
<b>Physical examination</b>	<b>15</b>	
<i>a. Performing a visual distance examination, including assessment of body condition</i>		
<i>b. Performing a thorough and systematic hands-on examination appropriate for the presenting complaint and any other abnormalities specific to the animal used</i>		
<i>c. Appropriate handling of the patient</i>		
<i>d. Accurately assessing the patient (eg, determining correct heart and respiratory rate, temperature, respiratory pattern, etc). Candidate may lose points for recording a finding that is not actually present.</i>		
<i>e. Accurately recording all findings on the appropriate medical form</i>		
<b>Integration of Clinical Information</b>	<b>12</b>	
<i>a. Identifies patient problems based on history and physical examination</i>		
<i>b. Develops a rational and comprehensive differential diagnoses list for most relevant problems identified</i>		
<b>Diagnostic Approach (logically ordering and justifying diagnostic tests relevant to the problems identified)</b>	<b>13</b>	
<i>a. Comprehensively orders diagnostic tests</i>		
<i>b. Efficiently orders diagnostic tests</i>		
<i>c. Orders diagnostic tests in a logical progression</i>		
<i>d. Justifies the rationale for each diagnostic test requested</i>		
<b>Integration of diagnostic information</b>	<b>15</b>	
<i>a. Interprets diagnostic test results accurately</i>		
<i>b. Uses diagnostic test results to refine the differential diagnoses list and describes how each test result is used to rule in or rule out diagnoses</i>		
<i>c. Arrives at the most likely diagnosis</i>		

*SAM01 continued on next page*

SAM01 ASSESSMENT, Clinical Evaluation		
Candidate Name/ID:	Date/Session/Site:	
ACTIVITY/SKILL	MAX POINTS	CANDIDATE SCORE
<b>Developing therapeutic plan</b> <i>Note: points will be deducted for developing a correct therapeutic plan for a set of differentials that does not include the correct diagnosis.</i>	15	
a. <i>Developing a therapeutic plan specific for the patient, to include addressing treatment and appropriate follow-up. The candidate should also address prevention and control issues.</i>		
b. <i>Developing the appropriate prognosis</i>		
<b>Communication skills</b>	15	
a. <i>Candidate communicates clearly and effectively with the client/examiner throughout the case</i>		
b. <i>Effectively answering the client/examiner's questions</i>		
<b>Total</b>	<b>100</b>	

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## Station Two—Medical Management

### *Overview of Station Two*

The candidate will be given a written clinical case scenario (eg, signalment, history, initial physical examination findings, and initial diagnostic test results) for a hospitalized canine or feline patient. The candidate will use the Medical Management and Treatment Order Form (see Appendix 3 of this section of the MOA) to write a **summary assessment** of the patient and **an initial management plan** for the patient. The written assessment and management plan should include the following: an initial summary assessment and a problem list, a differential diagnosis list, a tentative initial diagnosis, a tentative prognosis, additional diagnostic tests required for the next 12 hours, and a therapeutic plan for the next 12 hours that includes any drug dosages and fluid rates. The candidate will also write orders (eg, treatment orders, monitoring parameters, additional diagnostic tests, and contingency plans) for a veterinary technician who will be monitoring the patient for the next 12 hour time period. The candidate will also write a prescription appropriate for management of the case using the Prescription Form (see Appendix 2 of this section of the MOA). Once the written medical record, treatment orders, and prescription are complete, the candidate will use the rest of the time allotted to this station to orally communicate his/her assessment and written orders to a veterinary technician who will be caring for the patient for the next 12 hours and answer questions related to those orders. (The examiner will be acting as the veterinary technician who will be caring for the patient).

Each candidate must manage his/her time to ensure he/she has sufficient time to write the medical record, treatment orders, and prescription and to complete the oral communication portion of this station. At 35 minutes, the examiner will ask the candidate if he/she is ready to begin the oral portion of this station. If the candidate is not ready to begin the oral portion at 35 minutes, the examiner will allow him/her to continue with the written portion. In this case, the candidate will need to notify the examiner when they are ready to begin the oral portion. Scores will be negatively impacted if a candidate fails to leave sufficient time to complete the oral portion. Candidates who are ready for the oral portion prior to 35 minutes may notify the examiner directly and begin the oral portion at that time. This station will end no more than 45 minutes after the station began.

When required and requested by the candidate, standard laboratory data for appropriate diagnostic tests will be provided in written form with normal values.

Written records/orders may include any or all of the following:

- a summary assessment of the findings listed on the medical management and treatment order form
- an initial differential diagnoses list
- a tentative/initial diagnosis
- additional diagnostic tests required
- a treatment plan to include any drug dosages or fluid rates
- physiological parameters to be monitored by the veterinary technician and how often
- actions to be taken by the veterinary technician if monitored parameters fall outside of an acceptable range or if the animal displays abnormal signs specified by the candidate
- initial prognosis
- other relevant case information or treatment orders

Candidates will not be scored on writing quality or simple spelling errors, but the written records/ treatment orders must be legible, coherent, and recorded in a logical and systematic manner.

**Standard Script for Station Two**

The examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. Time does not begin until all instructions have been given.

“You will be given a written clinical case scenario (signalment, history, initial physical examination findings, and any initial diagnostic test results already completed) for a hospitalized canine or feline patient. Based upon this written information, you will develop and write a summary assessment and initial management plan for the patient, to include treatment orders and a prescription.

Please assume you are writing medical records, which are considered legal documents. Also assume you are caring for a real patient. If you prescribe a treatment or management plan that would result in serious harm to, or death of, a real patient, you may receive a “fatal flaw,” resulting in a score of zero for this station of the SAM section.

Your written assessment and management plan should include any or all of the following: an initial assessment and problem list, a differential diagnosis list, a tentative initial diagnosis, a tentative prognosis, additional diagnostic tests required for the next 12 hours, a therapeutic plan for the next 12 hours that includes any drug dosages and fluid rates, and one prescription to be written on the supplied form for a prescribed drug appropriate for the patient. A formulary is available for your use.

In addition to the initial assessment and management plan, you will need to record treatments ordered for the next 12-hour time period on the final page of the Medical Management and Treatment Order Form. Treatment orders should be specific for timing, dosages, and routes of administration as they pertain to additional diagnostic tests, monitoring parameters, and medications so that the orders can easily be understood by a veterinary technician who will be carrying out your orders.

You will not be scored on writing quality or spelling per se, but your initial assessment and management plan, treatment orders, and prescription must be legible, coherent, and recorded in a logical and systematic order.

When you are done with the written portion, please notify me so that you may begin the oral portion. I will be waiting [**sites must specify where the examiner will be so that the candidate does not waste any time notifying him/her; eg, inside or right outside the room where the candidate is writing the record**]. If you have not notified me by 35 minutes that you are ready to start the oral station, I will interrupt you to see if you are ready. If you are still not ready, you can continue the written portion, but you will then need to notify me when you are ready to begin the oral portion. Please give yourself enough time, because if you do not finish both the written and oral portions within the 45 minute time limit, your score for this station will be negatively impacted.

During the oral portion, I will be acting as the veterinary technician who will be caring for the case for the next 12 hours. You will need to discuss with me your summary of the patient, explain your treatment orders, and answer any questions I might have regarding the record or orders.



It is your responsibility to manage your time so that you can complete both the written and oral portion for this station. You will have a maximum of 45 minutes to complete all tasks for this Station”

***Assessment Sheet for Small Animal Medicine—Station Two (SAM02)***

SAM02 ASSESSMENT, Medical Management		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	MAX POINTS	CANDIDATE SCORE
<b>Written record</b> Candidates will be assessed on their ability to accurately and logically write a medical record, which may include the following:	<b>80</b>	
<i>a. Accurately interpreting and summarizing the History, Physical Exam, and results of diagnostic tests; providing a problem list, a list of differential diagnoses, a tentative diagnosis, a tentative prognosis; and recording a management plan. Candidates also assessed on writing findings in an orderly and well-accepted format.</i>		
<i>b. Accurately recording treatment orders.</i>		
<i>c. Accurately writing an example of a legal prescription appropriate for the case/patient.</i>		
<b>Oral communication</b> Candidates will be assessed on the following competencies:	<b>20</b>	
<i>a. Communicating the treatment plan and any relevant information from the medical record to the examiner acting as the veterinary technician.</i>		
<i>b. Concisely answering questions that the examiner, acting as the veterinary technician, may have regarding the written assessment or treatment orders developed by the candidate.</i>		
<b>TOTAL</b>	<b>100</b>	

**Station Three—Clinical Techniques**

**Overview of Station Three**—The candidate will be expected to complete 7 randomly selected skills – 2 skills from Part A and 5 skills from Part B.

**Standard Script for Station Three**—Prior to beginning this station, the examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. The time should not begin until all of the instructions have been given.

“In this Clinical Techniques Station, you will perform 7 common veterinary clinical procedures, which you may randomly select by picking 2 of the 4 laminated cards for Part A skills and 5 of the 13 laminated cards for Part B skills. You may refer back to your selected cards as you progress through this station so you do not have to memorize the skills you are required to perform. Some of the skills will involve the use of live animals, while you will use models to demonstrate some of the other skills. You should explain to me what you are doing as you are demonstrating or performing these clinical techniques. You may complete the skills in any order. You will have a total of 45 minutes to complete all 7 skills, so please plan accordingly.”

**Part A Skills:**

1. Gather the necessary equipment for, and demonstrate how to perform, cystocentesis.
2. Gather the necessary equipment for, and demonstrate how to perform, thoracocentesis.
3. Gather the necessary equipment for, and demonstrate how to perform, abdominocentesis.
4. Gather the necessary equipment for, and demonstrate how to perform, urinary catheterization of a male dog.

**Part B Skills:**

1. Listen to and interpret 2 cardiac sounds and describe as normal or abnormal. If abnormal, describe the abnormality (ie, type of murmur or arrhythmia).
2. Gather the necessary equipment for, and demonstrate how to perform, jugular venipuncture.
3. Calculate and draw-up the correct dosage of an antibiotic, given the dose and the size of the animal
4. Perform an evaluation of the integrity of the cranial cruciate ligament on a dog for suspected ruptured ligament.
5. Perform a urine specific gravity and determine if a cat's kidneys are concentrating the urine appropriately.
6. Starting with a blood sample in an EDTA tube, describe how to determine a packed cell volume (PCV) and total protein (TP), and determine the PCV and TP of a prepared hematocrit tube.
7. Perform a patellar reflex evaluation and describe how it could be affected by a spinal lesion.
8. Perform a skin scraping for suspected demodex using live animal and model
9. Perform one of the following cranial nerve examinations, describe the expected response to the procedure and state which cranial nerves are being tested: Menace Response, Facial Sensation, Gag Reflex, Pupillary Light Reflex.
10. Perform a fine needle aspirate on a fruit model and prepare a slide for analysis.

11. Perform a Schirmer tear test and interpret the results.
12. Perform a Fluorescein stain and interpret the results.
13. Perform a proprioceptive examination and interpret the results.

***Assessment Sheet for Small Animal Practice—Station Three (SAM03)***

SAM03 ASSESSMENT, Clinical Skills		
Candidate Name/ID:	Date/Session/Site:	
<i>Activity/Skill</i>	<b>MAX POINTS</b>	<b>CANDIDATE SCORE</b>
<b>PART A</b> Candidate is scored on ability to correctly and efficiently perform 2 of the following 4 skills:	<b>40</b>	
1. Gather the necessary equipment for, and describe how to perform a cystocentesis on a live animal. Demonstrate the technique on a stuffed animal model.		
2. Gather the necessary equipment for, and describe how to perform, thoracocentesis on a live animal. Demonstrate the technique on a stuffed animal model.		
3. Gather the necessary equipment for, and describe how to perform, abdominocentesis on a live animal. Demonstrate the technique on a stuffed animal model.		
4. Gather the necessary equipment for, and describe how to perform, urinary catheterization of a male dog. Demonstrate passage of a catheter on a suction tube model.		

<b>PART B</b> Candidate is scored on ability to correctly and efficiently perform 5 of the following 13 skills:	<b>60</b>	
5. Calculate and draw-up a correct dosage of an antibiotic, given the dose and the size of the animal.		
6. Perform evaluation of integrity of cranial cruciate ligament on a dog for suspected ruptured ligament.		
7. Perform a urine specific gravity and determine if a cat's kidneys are concentrating the urine appropriately.		
8. Starting with a blood sample, in an EDTA tube, describe how to determine PCV and TP, and determine the PCV and TP of a prepared sample.		
9. Perform a patellar reflex evaluation and describe how it could be affected by a spinal lesion.		
10. Perform a skin scraping for suspected demodex using live animal and model		

*SAM03 continued on next page*

SAM03 ASSESSMENT, Clinical Skills		
Candidate Name/ID:	Date/Session/Site:	
Activity/Skill	MAX POINTS	CANDIDATE SCORE
<b>PART B - Continued</b>		
11. Perform <u>one</u> of the following cranial nerve examinations. Describe the expected response to the procedure and state which cranial nerves are being tested.		
<i>i.</i> Menace Response		
<i>ii.</i> Facial Sensation		
<i>iii.</i> Gag reflex		
<i>iv.</i> Pupillary light reflex		
12. Perform a fine needle aspirate and prepare a slide for analysis using a fruit model.		
13. Perform a Schirmer tear test and interpret results		
14. Perform a fluorescein stain and interpret results		
15. Perform a proprioceptive examination and interpret results		
16. Listen to and interpret two (2) cardiac sounds		
17. Gather the necessary equipment for, and demonstrate how to perform, jugular venipuncture.		
<b>TOTAL POINTS</b>	<b>100</b>	

*Small Animal Medicine Summary Score Sheet*

<b>Small Animal Medicine Summary and Final Score Sheet Candidate Name/ID:</b>			
<b>Date/Session/Site:</b>			
<b>STATION</b>	<b>Raw Points Awarded</b>	<b>Weighting</b>	<b>Weighted Points Awarded</b>
STATION 1: Clinical Evaluation Total points awarded from SAM01 Assessment		<b>40%</b>	
STATION 2: Medical Management Total points awarded from SAM02 Assessment		<b>40%</b>	
STATION 3: Clinical Skills Total points awarded from SAM03 Assessment		<b>20%</b>	
<b>FINAL SCORE (60 weighted points required to pass)</b>		<b>100%</b>	

**Small Animal Medicine Appendices**  
**Appendix 1—History and Physical Examination Form**

**Candidate Name:**

**CPE Site/Date/Session (AM/PM)**

**Patient Species:**

Date: \_\_\_\_\_

Presenting Complaint:

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**RECORDING GUIDE**

1. Presenting Complaint
2. History of present illness
3. Past History
  - a) medical
  - b) surgical
  - c) trauma
  - d) vaccinations
4. Husbandry
5. Systems Review
  - a) integumentary
  - b) ophthalmic
  - c) otic
  - d) respiratory
  - e) cardiovascular
  - f) gastro-intestinal
  - g) urinary
  - h) reproductive
  - i) musculoskeletal
  - j) lymphatic
  - k) nervous
6. Signature



Candidate Name:

CPE Site/Date/Session (AM/PM)

Patient Species:

Date: \_\_\_\_\_

Presenting Complaint: \_\_\_\_\_

**CHECK ABNORMAL  
AND DESCRIBE BELOW**

1. General Appearance
2. Cardiovascular
3. Respiratory
4. Nervous
5. Musculoskeletal
6. Integumentary
7. Urinary
8. Reproductive
9. Gastro-intestinal
10. Lymphatics
11. Ophthalmic
12. Otic
13. Mucous Membranes
14. Oral Cavity
15. Other

Temperature
Pulse
Respiration
Weight
Temperament

**Appendix 2—Prescription Form**

**Candidate Name:**

**CPE Site/Date/Session (AM/PM):**

\_\_\_\_\_

Client name: \_\_\_\_\_

Client Address: 123 Main St, Columbus, Ohio

Client phone number: 432-123-4567

Animal name: \_\_\_\_\_

Species: \_\_\_\_\_

Rx

☐ Nonrefillable      ☐ Refillable ( \_\_\_\_\_ times through \_\_\_\_\_ [date])

DVM name: \_\_\_\_\_ DEA/Reg Number: 12345

DVM signature: \_\_\_\_\_ Date: \_\_\_\_\_

DVM Address: Animal Care Clinic, Columbus, Ohio

\_\_\_\_\_

**Appendix 3—Medical Management and Treatment Order Form**

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**-Page 1-****CPE SITE/DATE/SESSION (AM/PM):** \_\_\_\_\_**CANDIDATE Name/ID** \_\_\_\_\_

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**PATIENT INFORMATION (to be completed by the site)**

SPECIES/BREED: \_\_\_\_\_ AGE: \_\_\_\_\_

NAME: \_\_\_\_\_ SEX: \_\_\_\_\_

WEIGHT: \_\_\_\_\_ DATE ADMITTED: \_\_\_\_\_

OWNER NAME: \_\_\_\_\_ OWNER PHONE: \_\_\_\_\_

OWNER ADDRESS: \_\_\_\_\_

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**ADMISSION HISTORY AND PHYSICAL EXAMINATION FINDINGS (to be completed by the site)**

**Appendix 3— Medical Management and Treatment Order Form**

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**-Page 2-**

**DATE:** **CANDIDATE NAME/ ID:**

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**CANDIDATE’S INITIAL ASSESSMENT AND MANAGEMENT PLAN WRITTEN IN AN ORDERLY FORMAT**

*NOTE: Candidate must also complete treatment orders (final page of this form) and attach a completed prescription form (Appendix 2) for one appropriate prescribed drug*

Appendix 3— Medical Management and Treatment Order Form

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-Page 3-

DATE:

CANDIDATE NAME/ ID:

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CANDIDATE'S WRITTEN RECORDS (*continued*)

Appendix 3— Medical Management and Treatment Order Form

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-Page 4-

DATE:

CANDIDATE NAME/ID:

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CANDIDATE'S WRITTEN RECORDS (*continued*)

Appendix 3— Medical Management and Treatment Order Form

PATIENT TREATMENT ORDERS—PAGE 1 (assume a veterinary technician is taking over care and monitoring of patient from 5 pm-5 am)

Client Last Name:				TENTATIVE DIAGNOSIS									
Pet Name:													
Signalment:													
Doctor (Candidate) Name:													
Date:													
MONITORING PARAMETERS	5 p	6 p	7 p	8 p	9 p	10 p	11 p	12 a	1 a	2 a	3 a	4 a	5 a

FLUID TYPE AND RATE													
MEDICATIONS AND OTHER THERAPIES (including concentration, volume, and route of administration)	5 p	6 p	7 p	8 p	9 p	10 p	11 p	12 a	1 a	2 a	3 a	4 a	5 a
DIAGNOSTIC TESTS													



Appendix 3— Medical Management and Treatment Order Form

**PATIENT TREATMENT ORDERS—PAGE 2 (assume a veterinary technician is taking over care and monitoring of patient from 5 pm-5 am)**

**Doctor (Candidate) Name:**

**Date:**

**ADDITIONAL INFORMATION (eg, When to contact the doctor in charge, etc):**

## SURGERY

### Competencies

The surgery portion will assess the candidate's ability to:

- prepare the patient for a surgical procedure,
- prepare himself/herself for a surgical procedure,
- perform the surgical procedure.

ECFVG candidates may find it helpful to review small animal surgery techniques as described in up-to-date standard textbooks such as:

- Fossum TW, Hedlund CS, Hulse DA, et al. *Small Animal Surgery*, 4th ed. (2012), Mosby Year Book.
- Slatter D. *Textbook of Small Animal Surgery*, 3<sup>rd</sup> ed. (2004), Saunders.

### Time

Maximum time: 2.5 hours from initiation of patient preparation and transfer of the patient to the surgery room to completion of surgical procedure (placement of final skin suture) – including time required for extra instruments or suture material requested, or for changing gown and gloves. Candidates not completing the surgical procedure in this time period will fail the Surgery Section of the CPE. However, at the examiner's sole discretion, a candidate's clock might be stopped as appropriate during an excessive delay that is preventing the candidate from continuing with the procedure.

### Set-up Information

1. Animal Requirements: One female dog per candidate, 6-28kg (BCS within 2-4 out of 5), not visibly or palpably pregnant, not visibly in heat (ie, no visible external evidence of bloody vaginal discharge), healthy based on physical examination.

Extreme care will be made to ensure dogs used in this section are sexually intact. However, should a candidate discover after opening the abdomen that an ovariohysterectomy had previously been performed, the candidate will indicate this to the examiner by identifying and demonstrating the ovarian pedicles and the uterine stump. The examiner will then evaluate the candidate's skill in closing the surgical site. No additional time will be added.

2. Minimum People Requirements
  - a. One veterinary examiner per 3 candidates
  - b. One technical assistant or veterinary technician per 4 candidates
3. Facilities and Equipment
  - a. Rooms (or areas) equipped for the preparation of animals for surgery
  - b. Rooms (or areas) equipped to carry out the required surgical procedures
  - c. Timing device visible from each station to track examination time. Please note that when possible, timers will be of the "count-down" variety to allow candidates and examiners alike to clearly see time remaining in station or section.

4. Supplies/Information Provided By The Examiner

- a. Surgical supplies and clothing commonly used for the teaching of undergraduate veterinary surgery, including an assortment of suture materials, gloves, masks, caps, etc.
- b. Sterile surgical gown pack; use of/gowning with to be demonstrated during orientation.

There will be variation in the type of supplies available for surgery. Candidates will need to have some flexibility in the selection of appropriate material. Candidates may be asked to use either standard gowns or wrap-around gowns.

5. Supplies Provided By The Candidate

- a. Stethoscope, rectal thermometer, penlight, clean laboratory coat, surgical scrubs

**General Requirements of the Candidate**

Candidates are expected to handle all animals in a humane and safe manner. If, in the opinion of the examiner, the candidate does not handle the animal humanely or handles the animal in a manner that is unsafe to him/her or other personnel the examiner may assess penalties ranging from a skill failure to dismissal of the candidate with a fatal flaw and a ‘fail’ for the Surgery Section of the CPE. The exam will also be terminated and the candidate dismissed if, in the opinion of the examiner, the candidate is jeopardizing the health and well-being of the animal patient.

The Surgery and Anesthesia sections of the CPE will be administered at the same time. An anesthesia candidate will anesthetize, stabilize, and monitor the animal while a surgery candidate performs the surgical procedure.

The Surgery section of the CPE will be scored on a pass/fail basis. No numerical score will be given. A “pass” equates with at least a minimally competent performance of surgical skills expected of an entry-level veterinarian. The examiner will use the surgical skills assessment sheet (SU01) as a checklist to record comments regarding each candidate’s behaviors. The examiner will note both positive and negative behaviors, but will not provide the candidate with any feedback except in the case of a fatal flaw (see Surgery Appendix 1).

Should a candidate receive an “inadequate behavior/low risk to patient” assessment (column on the SU01 assessment sheet marked with a +) for three or more skills, he/she will be allowed to complete the Surgery section (unless the cumulative errors puts the animal’s life in danger) but will receive a failing grade for this section.

Should a candidate receive an “**INADEQUATE/HIGH RISK TO PATIENT OR DID NOT PERFORM AT ALL**” assessment (corresponds to the column on the SU01 assessment sheet marked with an \*) for any one skill, the examiner **MAY** stop the candidate from continuing in the Surgery Section; then identify, verify with a second examiner/observer, record, and correct the fatal flaw; and award the candidate a **FAILING GRADE** for the Surgery Section. The candidate will not be allowed to complete the Surgery Section.

In addition to possibly being dismissed for receiving an “inadequate/high risk to patient or did not perform at all” assessment, a candidate may be dismissed for committing a fatal flaw listed in Appendix 1 to this section (see final page of this MOA). Fatal flaws are failing behaviors that potentially put the animal’s life at risk or personnel in danger. All are behaviors that may require examiner intervention and will result in a failing grade for the candidate and dismissal from this section of the CPE. The examiner may stop the Surgery Section immediately if any one behavior from the fatal flaw list (Appendix 1) is observed (ie, recognized by the examiner and confirmed by another examiner or observer).

It is imperative that candidates maintain aseptic technique throughout the procedure. If, at any time during the preparation, gowning and gloving, or draping of the patient, the candidate accidentally contaminates him/herself or the surgical field, the candidate should immediately notify a technician or an examiner and will be given the opportunity to correct the situation. If a break in aseptic technique during these stages is observed by a technician or examiner and the candidate does not recognize or indicate that that has happened, he/she will be informed that they have contaminated themselves or the surgical field, given a warning, and allowed to correct the situation. Candidates who break aseptic technique a second time without recognizing it themselves and informing the technician or examiner will be given a fatal flaw and dismissed from the remainder of the procedure.

Once the surgical incision is made (ie, the surgical procedure has begun), candidates are not given one warning for a break in aseptic technique that they do not recognize. During the surgical procedure, candidates must recognize any break in aseptic technique, inform the examiner that they need to correct the situation, and then appropriately and completely address the break in asepsis. If, in the examiner's opinion, the candidate fails to appropriately and completely address the break, the candidate will be given a fatal flaw and dismissed from the remainder of the procedure. Additionally, if the examiners or technicians observe a candidate break aseptic technique during the surgical procedure and the candidate does not recognize or take proper steps to correct it, the candidate will be issued a fatal flaw for putting the animal's life at risk. Candidates are allowed a total of 5 breaks in aseptic procedure, inclusive of the first break that may be issued as a warning by the examiner if occurring prior to the surgical incision. Candidates breaking aseptic technique for a 6<sup>th</sup> time will be dismissed with a fatal flaw.

Please note that there are many factors that go into the pass/fail decision in this section. Successful entry-level performance of the skills assessed in the Surgery Section involves much more than having the patient survive the surgery—in other words, more than getting through the procedure without being dismissed for committing a fatal flaw. Candidates are also reminded that the ECFVG is evaluating clinical procedures on a living animal that may result in deleterious, even fatal consequences to that animal. Therefore, the assessment of the adequacy of the surgical procedure can be affected by the discovery of clinical changes after the procedure is completed that can be ultimately traced to errors made by the candidate surgeon leading to awarding of a fatal flaw after the surgical procedure has been completed. Candidates should be aware that the final score for the surgery section is not determined until 24 hours after completion of the surgery. Complications arising from surgical error within the initial 24 hour post-operative period will adversely affect their score for the surgery section. Examples of such complications include, but are not limited to, intraabdominal haemorrhage due to inadequate vascular ligation or herniation or dehiscence of abdominal contents due to inadequate abdominal wall closure.

### **Overview of the Surgery Section**

The candidate will perform an elective ovariohysterectomy on a dog anesthetized by another candidate or an anesthetist. A veterinary technician will be available to provide materials but must be instructed by the candidate in all actions to perform. Candidates should assume that surgery is being performed on a client-owned animal that will be going home after a sufficient recovery period within the veterinary hospital.

Once the dog is anesthetized, the candidate will prepare the dog for ovariohysterectomy, prepare him or herself to perform the surgery aseptically; and perform the ovariohysterectomy. As the candidate

progresses through the surgery, there are several points at which the candidate must ask the examiner to check the patient before continuing with the procedure. First, candidates must demonstrate each ovarian pedicle and the uterine body ligatures to the examiner prior to releasing those structures into the abdomen and leave the excised reproductive tract on the instrument tray so that the examiner can assess the tract as time permits. Second, candidates must inform the examiner when he/she is ready to start the abdominal wall closure and must also state the size and type of suture material he/she will use during the closure. Finally, candidates must announce to the examiner when he/she has completed the abdominal wall closure and must wait for the examiner to check the closure before continuing on with closure of the skin and subcutaneous layers. If a candidate must wait for the examiner to evaluate the ligatures, the surgical site before beginning the abdominal wall closure, or the completion of the abdominal wall closure, the time spent waiting will be added to the candidate's total allowed time (ie, time spent waiting for the examiner will not count against the candidate's total allowed time for this section).

(Note—See also SU01 Assessment Sheet on the following pages)

### **Standard Script for Surgery Section**

The examiner should read the following script (in quotes) to each candidate. The script may be modified to meet specific facility or equipment restrictions at each site. Time should not begin until all instructions have been read.

“In this section, you will be the veterinary surgeon. A technician will be available to assist you, but only at your request. We will be evaluating your performance and will be recording both positive and negative behaviors. Please do not let our writing affect your performance. We cannot offer feedback during or after the examination, but we may interrupt and stop the examination if you commit an error that places the animal in a potentially life-threatening situation or yourself or other personnel in danger. If you are excused, please understand that it is not a personal decision and you will be required to leave the area immediately. Trying to discuss the situation may detract from the examiner's ability to evaluate other candidates and place them at a disadvantage.

You will be performing an elective ovariohysterectomy on a dog. Please assume the surgery is being performed on a client-owned animal that will be going home after a sufficient recovery period within your hospital.

Once the dog is anesthetized, you will be required to prepare the dog for ovariohysterectomy, prepare yourself to perform the surgery aseptically; and perform the ovariohysterectomy.

You will need to request supplies or equipment as needed for surgical preparation and the surgical procedure. If the specific supply or equipment you request is not available, you will be asked to make another choice from the equipment and supplies we have available here.

It is imperative that you maintain aseptic technique throughout the procedure. If, at any time during the preparation, gowning and gloving, or draping of the patient you accidentally contaminate yourself or the surgical field, you should immediately notify a technician or an examiner and you will be given the opportunity to correct the situation. If a break in aseptic technique during these stages is observed by a technician or examiner and you do not recognize

or indicate that that has happened, you will be informed that you have contaminated yourself or the surgical field, given a warning, and allowed to correct the situation. Candidates who break aseptic technique a second time without recognizing it themselves and informing the technician or examiner will be given a fatal flaw and dismissed from the remainder of the procedure.

Once the surgical incision is made (ie, the surgical procedure has begun), candidates are not given one warning for a non-recognized break in aseptic technique. During the surgical procedure, candidates must recognize any break in aseptic technique, inform the examiner that they need to correct the situation, and then appropriately and completely address the break in asepsis. If, in the examiner's opinion, the candidate fails to appropriately and completely address the break, the candidate will be given a fatal flaw and dismissed from the remainder of the procedure. Additionally, if the examiners or technicians observe a candidate break aseptic technique during the surgical procedure and the candidate does not recognize or take proper steps to correct it, the candidate will be issued a fatal flaw for putting the animal's life at risk.

Additionally, candidates are limited to 5 total breaks in aseptic technique. Candidates committing a 6<sup>th</sup> break in aseptic technique will be dismissed with a fatal flaw.

During the surgical procedure, once you have ligated the ovarian pedicles and uterine body, you must demonstrate the ligatures to the examiner prior to releasing them into the abdomen. Failure to do so may result in a considerable time delay as you retrieve the ovarian pedicles and uterine stump for examiner evaluation. Once you have excised the reproductive tract, please leave it on the instrument tray so that the examiner can assess the reproductive tract as time permits.

When you are ready to start the abdominal wall closure, you must inform the examiner and you must tell the examiner the size and type of suture material you plan to use for the closure. After you have completed the abdominal wall closure, you will need to have the examiner come over to assess your closure before proceeding. Any time spent waiting for the examiner for any of the above assessment points will not be counted against your total time allowed for this section.

We have made every attempt to ensure all dogs used in this section are sexually intact. However, if you discover your patient has already been spayed, you will be required to identify and demonstrate the ovarian pedicles and uterine stump to the examiner prior to closing the incision.

You have 2.5 hours to complete this section of the CPE from initiation of patient preparation to placement of the final skin suture. Please plan your time accordingly."

### ***Assessment Sheet for Surgery (SU01)***

Skills to be assessed include those involved in:

- a. Patient and surgeon preparation;
- b. Performing an ovariohysterectomy.

Should a candidate receive an "inadequate behavior/low risk to patient" assessment (corresponds to the column on the SU01 assessment sheet marked with a †) for three or more skills, he/she will be allowed to complete the Surgery section (unless the cumulative errors puts the animal's life in danger) but will receive a failing grade for this section.

Should a candidate receive an “**INADEQUATE/HIGH RISK TO PATIENT OR DID NOT PERFORM AT ALL**” assessment (corresponds to the column on the SU01 assessment sheet marked with an \*) for any one skill, the examiner **MAY** stop the candidate from continuing in the Surgery Section; then identify, verify with a second examiner/observer, record, and correct the fatal flaw; and award the candidate a **FAILING GRADE** for the Surgery Section. The candidate will not be allowed to complete the Surgery Section.

In addition to possibly being dismissed for receiving an “inadequate/high risk to patient or did not perform at all” assessment, a candidate may be dismissed for committing a fatal flaw listed in Appendix 1 to this section (see final page of this MOA). Fatal flaws are failing behaviors that potentially put the animal’s life at risk or personnel in danger. All are behaviors that may require examiner intervention and will result in a failing grade for the candidate and dismissal from this section of the CPE. The examiner may stop the Surgery Section immediately if any one behavior from the fatal flaw list (Appendix 1) is observed (ie, recognized by the examiner and confirmed by another examiner or observer).

<b>SU01 Assessment, Surgical Skills</b> <b>Candidate Name/ID:</b> <b>Date/Session/Site:</b>			
<b>Patient Preparation—Candidates will be assessed on their ability to prepare the patient’s surgical site for aseptic surgery:</b>	<b>Adequate/Pass</b>	<b>†Inadequate with low risk to patient</b>	<b>*Inadequate with high risk to patient OR did not perform task at all (fatal flaw)</b>
<b>HAIR REMOVAL</b> – Check any comments below, assign overall score in columns to right			
<b>SKIN PREPARATION</b> – Check any comments below, assign overall score in columns to right			
<b>PATIENT POSITIONING</b> – Check any comments below, assign overall score in columns to right			
<b>DRAPING</b> – Check any comments below, assign overall score in columns to right			
<b>ATTIRE &amp; SCRUBBING</b> – Check any comments below, assign overall score in columns to right			
<b>GOWNING/GLOVING</b> – Check any comments below, assign overall score in columns to right			
<b>SURGICAL INCISION – CHECK ANY COMMENTS BELOW, ASSIGN OVERALL SCORE IN COLUMNS TO RIGHT</b>			
<b>EXCISION OF OVARIES – CHECK ANY COMMENTS BELOW, ASSIGN OVERALL SCORE IN COLUMNS TO RIGHT</b>			

*SU01 continued on next page*



<b>SU01 Assessment, Surgical Skills</b>			
<b>Candidate Name/ID:</b>			
<b>Date/Session/Site:</b>			
<b>Ovariohysterectomy—Candidate assessed on following skills (continued):</b>	<b>Adequate / Pass</b>	<b>†Inadequate with low risk to patient</b>	<b>*Inadequate with high risk to patient OR did not perform task at all</b>
<b>REMOVES MAJORITY OF UTERUS</b> – Check any comments below, assign overall score in columns to right			
<b>ABDOMINAL WALL CLOSURE</b> – Check any comments below, assign overall score in columns to right			

<b>CREATES SECURE SUBCUTANEOUS AND SKIN CLOSURE</b> – Check any comments below, assign overall score in columns to right			
<b>TISSUE HANDLING - CHECK ANY COMMENTS BELOW, ASSIGN OVERALL SCORE IN COLUMNS TO RIGHT</b>			
<b>HEMOSTASIS - CHECK ANY COMMENTS BELOW, ASSIGN OVERALL SCORE IN COLUMNS TO RIGHT</b>			
<b>KNOT TYING AND LIGATURES - CHECK ANY COMMENTS BELOW, ASSIGN OVERALL SCORE IN COLUMNS TO RIGHT</b>			
<b>PREVIOUSLY SPAYED ANIMAL - CHECK ANY COMMENTS BELOW, ASSIGN OVERALL SCORE IN COLUMNS TO RIGHT</b>			

*SU01 continued on next page*

<b>SU01 Assessment, Surgical Skills</b> <b>Candidate Name/ID:</b> <b>Date/Session/Site:</b>			
<b>Ovariohysterectomy—Candidate assessed on following skills (continued):</b>	<b>Adequate / Pass</b>	<b>†Inadequate with low risk to patient</b>	<b>*Inadequate with high risk to patient OR did not perform task at all</b>
<b>ASEPSIS</b> - Check any comments below, assign overall score in columns to right <input type="checkbox"/> Candidate commits 6 breaks in aseptic technique (candidate dismissed). Please list brief descriptions (ie, drape pulled from dirty to clean; dropped hand below surgical field, etc):  1.  2.  3.  4.  5.  6.			
<b>OVERALL SURGICAL EFFICIENCY</b> - Check any comments below, assign overall score in columns to right			

## **Surgery Appendices**

### ***Appendix 1—Fatal Flaw List***

These are failing behaviors that potentially put the animal's life at risk or personnel in danger. All are behaviors that may require examiner intervention and will result in a failing grade for the candidate and dismissal from this section of the CPE.

The examiner will stop the Surgery Section immediately if any one behavior from the following fatal flaw list is observed (ie, recognized by the examiner and confirmed by another examiner or observer):

1. Candidate fails to control significant hemorrhage.
2. Candidate fails to create a secure closure of the abdominal wall.
3. Candidate is unable to achieve and maintain an aseptic field (to include patient and surgeon preparation).
4. Candidate causes significant damage to other tissues/organs (eg, clamping or tying off one or both ureters).
5. Candidate exhibits any other behavior that would put the animal's life at risk. The examiner must document the behavior (eg, leaving instrument/sponge/ other surgical equipment in animal).