STATUTORY MEMBERSHIP EXAMINATION

SYLLABUS

THE HORSE

Commentary

This syllabus relates principally to the horse, but also includes the donkey, used for leisure and sporting activities.

Welfare, husbandry and management

- An outline knowledge of the horse industry in the UK, including its structure and economics
- The management and care of the various types of horse, in relation to the work which they are required to do
- Saddlery, tack and clothing
- Basic farriery
- Feeding and nutrition, including a knowledge of the basic constituents of horse diets and the requirements for different classes of horse
- The safe handling and restraint of horses
- Grooming and simple foot care
- Normal and aberrant behavioural patterns
- Legislation in the UK relevant to the horse
- Ageing, and simple dentistry
- Methods of euthanasia
- Management of the breeding stallion, brood mare and newborn foal including controlled breeding, artificial insemination and embryo transfer

Diseases and disorders

- Their pathophysiology
- Clinical examination (including the examination for purchase), principles and application of appropriate diagnostic aids, diagnosis, treatment (including surgical), and prevention (including vaccination and anthelmintic strategies) of common diseases and disorders of all body systems that occur in the UK and mainland Europe
- The effect of drugs and other therapeutic substances
- Dystocia and the relevant obstetrical procedures
- Fluid therapy
- Zoonoses, including possible imported diseases to the UK (also relevant to veterinary public health (vph))
- Principles and applications of dietary management
- Bio-security and notifiable diseases (also relevant to vph)

Clinical pathology

- Techniques for sampling, sample handling and basic laboratory techniques
- Interpretation of haematological and biochemical results
- Interpretation of cytological and histopathological results (the interpretation of actual specimens is not required)
Diagnostic imaging

- Principles and application of the common imaging techniques (radiography, ultrasonography, endoscopy, including their safe usage and a knowledge of the current relevant legislation in the UK
- Selection and limitations of procedures used for diagnosis

Anaesthesia and analgesia

- Principals of premedication, intravenous and inhalation anaesthetic agents
- Principles of regional and local anaesthesia
- Principals of analgesia

Surgical principles

- Principles of wound healing
- Principles of surgical asepsis, sterilisation and disinfection
- Care and maintenance of surgical facilities and equipment
- Surgical instrumentation
- Preoperative assessment of the surgical patient
- Surgical infections and antibiosis
- Suture materials and other biomaterials
- Haemostasis
- Suture patterns
- Postoperative care of the surgical patient, including management of postoperative pain
SMALL COMPANION ANIMALS

Commentary

The syllabus for small animal medicine and surgery relates to dogs, cats, pet rabbits (not those kept for meat production) and, to a more limited extent, other small mammals such as guinea pigs and rodents, reptiles and cage birds, that are kept as pets.

Welfare, handling and husbandry of small companion animals

- An outline knowledge of the pet animal industry in the UK, including relevant legislation such as pet passports and travel regulations (also relevant to vph)
- A knowledge of the ways in which pet animals are kept in the UK, including housing where appropriate
- Responsible pet ownership. The normal nutritional requirements for good health at the various stages of their life and development
- A knowledge of normal and aberrant behaviours
- Animal breeding, including the artificial control of reproduction and AI
- Genetics and the control schemes for hereditary diseases in the UK
- Appropriate handling and restraint of animals of all ages effectively and humanely, and the ability to instruct others in this with due regard to health and safety legislation
- The ethics of keeping animals as pets
- An understanding of the human/animal bond
- A knowledge of current practices with regard to cosmetic surgery including mutilations and euthanasia

Diseases and disorders

- Their pathophysiology

- Clinical examination, principles and applications of appropriate diagnostic aids

- Diagnosis, treatment (including surgical), and prevention (including anthelmintic and vaccination programmes) of common disease and disorders in the UK of all body systems
- The effect of drugs and other therapeutic substances
- Obstetrics
- Zoonoses, including possible imported diseases to the UK (also relevant to vph)
- Notifiable diseases (also relevant to vph)
- Principles and applications of dietary management as part of the treatment and prevention of disease
- Principles of prescribing and dispensing. The use of controlled drugs and an understanding of the ‘cascade’ system

Clinical Pathology

- Techniques for sampling, sample handling and basic laboratory techniques
- Interpretation of routine clinical pathology tests
- Interpretation of cytology, histopathology, microbiology and parasitology laboratory results (candidates will not be required to perform laboratory procedures)
Diagnostic Imaging

- Principles and applications of the common imaging techniques (radiography and ultrasonography)
- Their safe usage, including relevant UK legislation
- Selection and limitations of procedures used for diagnosis
- Principles and applications of contrast techniques

Anaesthesia and Analgesia

- Principles of premedication, intravenous and inhalation anaesthetic agents
- Principles of regional and local anaesthesia
- Principles of analgesia

Trauma and hospital care

- Principles and techniques applicable to practice, including fluid therapy, cardiovascular and respiratory support
- An understanding of the effects of trauma on all tissues
- Understanding the importance of stabilisation of the trauma/critical patient prior to undertaking surgical treatment

Surgical Principles

- Principles of wound healing
- Principles of surgical asepsis, sterilisation and disinfection
- Care and maintenance of surgical facilities and equipment
- Preparation of the operation site and surgical team
- Surgical instrumentation
- Preoperative assessment of the surgical patient
- Surgical infections and the use of antibiotics
- Suture materials and other biomaterials
- Haemostasis
- Suture patterns
- Postoperative care of the surgical patient; including management of peri-operative pain
PRODUCTION ANIMALS

Commentary

The species concerned are: cattle (dairy and beef), sheep, goats, pigs, domestic poultry, and farmed fish.

Welfare, handling and husbandry

- An outline knowledge of the structure and economics of the livestock industry in the UK.
- A knowledge of the various methods of animal husbandry and production systems used in the UK, both intensive and extensive, their advantages and disadvantages
- Animal housing and the environments in which production animals are kept
- Basic nutritional requirements of farm livestock at different ages and stages of production
- Common dietary constituents, used in compounding rations
- Feed supplements and additives
- Nutritional deficiencies
- Know how, and be able, to handle and restrain animals of all ages, and be able to instruct others, ensuring that it is done with due regard to health and safety legislation
- Ethics and animal use
- The needs of farm animals and the 5 freedoms
- Codes of recommendations for the welfare of farm animals, and legislation affecting farm animal welfare in the UK
- Welfare standards on the farm, during transport, in the market place and at the slaughterhouse (also relevant to vph)
- The transport of casualties

Animal Health (also relevant to vph)

- Monitoring, sampling and certification in relation to the health and freedom from specific diseases
- The control of the spread of disease, disinfection and simple biosecurity measures
- A knowledge of the legislation in the UK and the EU in relation to animal health and veterinary practice, including use, prescription and dispensing of medicines
- A knowledge of notifiable diseases

Diagnostic methods

- Clinical examination
- Case recording
- Post-mortem examination and abattoir monitoring (Gross pathology only)
- Collection and preservation of samples for laboratory examination
- Routine diagnostic laboratory techniques (detailed practical knowledge of specific laboratory tests such as serological tests are not required).
Diseases and disorders

- The diseases and disorders (infectious, metabolic, traumatic) of farm animals, both in individual animals, small groups and large populations which are commonly encountered in the UK and mainland Europe. Including their diagnosis, treatment (surgical if appropriate), prevention and control (including anthelmintic and vaccination strategies)
- The effect of drugs and other therapeutic substances
- Collection, processing, interpretation and management of data obtained from animal populations
- Descriptive epidemiology

Zoonoses

- Zoonoses and their implications, including the tracing of zoonoses and outbreak investigations (also relevant to vph)

Disease prevention

- Prophylactic medication and disease prevention by means of husbandry methods (eg grazing management). Immunity and vaccination

Surgical procedures

- Routine surgical procedures and anaesthesia, including routine stockman's tasks and euthanasia

Reproduction

- Normal and abnormal reproduction
- Artificial insemination and embryo transfer
- The artificial control of cyclical ovarian activity
- Dystocia, treatment and prevention
- Herd/flock/fertility control programmes, principle and method of application, including recording systems
- Genetics and animal breeding

Environment

- Interaction between the environment, welfare and production (also relevant to vph)
VETERINARY PUBLIC HEALTH

Commentary

Veterinary public health encompasses the whole ‘farm to fork’ area and includes aspects of the husbanding of animals, their welfare and health at production and the transport phases as well as the slaughter stage. Candidates must also be aware of the importance of occupational zoonoses.

Candidates should be able to:

- Understand the relationship between animal health, animal welfare and public health
- Recognise and advise on the consequences for human health and the environment of animals and their management, and through this contribute to the improvement of human well-being as part of a multidisciplinary team
- Understand the scientific basis for the legislative control of food and protection of the environment
- Advise on the suitability of animals for food production (also relevant to production animals), recognise and apply the principles of food hygiene and safety, including food inspection and control, and implement the principles of health certification of food.
- Understand and apply the principles of risk analysis, particularly as they relate to food safety at all stages of the food chain.
- Understand the principles behind the devising and operation of food safety management systems based on principles of Good Manufacturing/Hygienic Practices (GMP, GHP), Hazard Analysis Critical Control Point (HACCP) and Safety and Quality Assurance systems.

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