

## Veterinary Public Health

PAPER 4

3 hours

Day Month Year

*This examination question paper is in two sections – Section A and Section B. Each section carries 50% of the total marks available for this examination paper and candidates are advised to allocate their time accordingly.*

*Within questions percentages in brackets are used to indicate what proportion of the marks for that question has been allocated to a particular part or sub-section of the question.*

*Candidates should answer **THREE** questions from Section A and should attempt **ALL** questions in Section B.*

*Candidates should start each answer on a new answer sheet and write the question number in the margin of each sheet used.*

### **SECTION A** (answer **either** (a) **or** (b) from each of the 3 pairs of questions)

1(a) The accurate identification of farm animals is important for assisting disease control, and increasingly for quality assurance purposes. Write an essay on the ways by which this may be achieved in cattle, sheep, and pigs. Indicate the advantages and disadvantages of each method you describe.

**OR**

1(b) Briefly describe the methods of slaughter commonly practised in red meat abattoirs and poultry slaughter plants in the UK (50%). Indicate how an effective stun would be recognised by the inspection team (25%) and identify the relevant legislation concerning the slaughter of animals (25%).

2(a) The Hazard Critical Control Programme (HACCP) has been used in the food industry since 1985, and is now being applied on the farm. Consider the possible hazards in food of animal origin on a **dairy farm**, and identify, using a diagram if appropriate, where control points exist (50%) and comment on the level of control that may be achieved (50%).

**OR**

2(b) Outline the advice that you would give to farming clients so that they comply with the Veterinary Medicines Directorate's 'Code of Practice on the Responsible Use of Animal Medicines on the Farm'.

3(a) Describe the functions of the Meat Hygiene Service in relation to the Food Standards Agency; the Department for Environment, Food, and Rural Affairs (DEFRA); the control of Specified Risk Material; cattle traceability; the Over 30 Months Slaughter Scheme; and the Hygiene Assessment Scheme.

**OR**

- 3(b) List **five** zoonotic diseases that might be contracted from ruminant species by school children, whilst visiting a working farm in the UK (20%). What advice would you give to the farmer for minimising the risk of the children becoming infected with all five of those that you have listed? (80%)

**SECTION B** (answer **all** questions)

1. Define the terms 'disinfection' and 'sterilisation' (60%). Summarise the properties of a disinfectant suitable for routine use on equipment in a meat processing plant (40%).
  2. List the parasitic diseases, which might be detected in the lungs and livers of cattle slaughtered in the UK (50%), and indicate what action meat inspectors should take in each case (50%).
  3. Briefly describe how you would investigate the reason for the bulk milk from a dairy farm in your practice, failing a test for inhibitory substances carried out at the dairy.
  4. You are requested to examine a dog which has suddenly developed acute diarrhoea. A faeces sample is sent to a laboratory and the report is faxed to you in 4 days. Compare the significance of a finding of *Campylobacter jejuni* with that of *Salmonella typhimurium*, with regard to the advice you would give to the owner.
  5. List **four** possible types of residues that may be found in food of animal origin (40%). Indicate briefly the controls that are in place to reduce or eliminate the risk of them being present (60%).
  6. What is a zoonosis? (60%) List **four** zoonoses that may be found in cats and dogs (40%).
  7. Describe the action you would take on finding the following at post-mortem inspection:
    - A calf with a swollen umbilicus (20%)
    - A lamb with adhesions on the pleura (20%)
    - A cattle carcass with yellow-coloured fat (20%)
    - A pig with extensive haemorrhagic lesions on the kidney (20%)
    - A broiler with air sacculitis (20%)
  8. Summarise the veterinarian's responsibilities when he or she prescribes the inclusion of a prescription only medicine (POM) in animal feed.
  9. Minced beef hamburgers sold in fast-food restaurants may act as a source of salmonellas for humans. Summarise, preferably in tabular form, the critical control points that should be applied to minimise the risk, from the time that the animal arrives at the slaughterhouse until the sale of the cooked meat product.
  10. A pet cat or dog requires a certificate before it can enter the UK without quarantine. List, in the correct order, the **four** procedures that a veterinary surgeon has to follow under the 'PETS' scheme before a certificate can be issued (50%). Summarise the information that this document must contain in order for it to be valid (50%).
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