

Specimen Paper 2016 Answer Guide

Unit 1

Describe <b>TWO</b> features of the house-mouse which would help you to distinguish it from a young common rat.....		Pointed muzzle; large ears, longer tail, tail colour, small feet, notch in incisor teeth, larger eyes
Which of the following characteristics or habits can be used to distinguish between the Norway rat and the water vole? <input type="checkbox"/> Strong swimmer <input type="checkbox"/> Diet can include cereals and vegetation <input type="checkbox"/> Droppings are found in latrines <input type="checkbox"/> Ears are large <input type="checkbox"/> Tail is shorter than head and body  b) With which protected British mammal is the Mink most frequently confused?	3 2	D  Otter
In a building infested by both <i>R. rattus</i> and <i>R. norvegicus</i> , <i>R. rattus</i> would likely be found in the upper floors. Explain why this is.	5	<i>R. rattus</i> better climber. Avoids competition
State <b>TWO</b> reasons why Grey Squirrels are considered pests in and around buildings and gardens	5	- gnawing damage to structure, pipe-work and cables – particularly when they enter roof spaces. - noise and disturbance – i.e. activating intruder alarms - Raiding bird-tables - Raiding refuse bins - Taking/damaging fruit - Stripping bark from trees disease
a) What disease is commonly transferred via rat's urine.  b) What environmental conditions are required to transfer the disease?	2  3	a) Weils disease / leptospirosis  b) wet conditions, stagnant water, (no current)
State <b>TWO</b> tests that can be applied to an existing drainage system to determine if it is connected to rat activity on the surface	5	smokes, dyes, CCTV.



<p>The success of a rodent control strategy in a block of retail food outlets depends on using an integrated approach, involving additional measures instead of the use of rodenticides.</p> <p>Give TWO examples of measures that could be adopted</p>	<p>2.5 each</p>	<ol style="list-style-type: none"> <li>1) Carry out proofing to the premises</li> <li>2) Each of the premises have comprehensive pest control servicing contracts in place</li> <li>3) Remove food sources such as fly tipping in the area</li> <li>4) Ensure all premises in the block are treated</li> <li>5) Ensure adequate arrangements are in place for the storage/disposal of refuse/waste food.</li> <li>6) Ensure all parts of premises on the block including roofspace etc receive treatment.</li> </ol>
<p>Rodent glue boards are an important tool for the pest control technician. If not used correctly, however, their use may be considered inhumane. List FIVE essential features of a control exercise for rodents using glueboards which will meet good industry practice</p>		<ul style="list-style-type: none"> <li>• Use as last resort only</li> <li>• Use the correct sized board for the target rodent</li> <li>• Inspect regularly preferably every 12 hours</li> <li>• Ensure that you or a briefed, trained person can check the boards within the required time frame</li> <li>• Do not place where not targets may be at risk</li> <li>• Make a location plan with each board numbered and identified</li> <li>• Dispatch trap rodents humanely</li> <li>• Remove boards at the end of the treatment</li> </ul>

		<ul style="list-style-type: none"> <li>Dispose of boards in a manner that non target animals cannot be trapped on them</li> </ul> <p>Indoor use only</p>
a) Name two higher toxicity SGARs. b) Why would these be considered for use.	2  3	<p>a) the more highly toxic anticoagulants such as brodifacoum and flocoumafen, difethialone</p> <p>b) -Control can be achieved in a single feed. Beneficial on sites with higher alternate food source. -Smaller quantities of both required</p>
Describe a baiting strategy for:  a). Common rat external to property b) House Mouse		<p>a) Usually outside in protected bait boxes at ground level or directly into the burrow, approx 200g, a few baits laid on rat runs</p> <p>b) Many small baits (20g) laid at different heights, indoors</p> <p>Bait in accordance with product label Must be included</p>
List FIVE pieces of advice a pest controller can give to a customer to help prevent rodents being attracted to and potentially damaging their sites	5	Removal of foliage, good hygiene practices, removal of harbourage points, stock rotation, controlling water sources, regular pest inspections by contractor , proofing, cleaning

## Unit 2

a) List the stages of the life cycle of the Fruit fly ( <i>Drosophila</i> spp) – words or diagram acceptable	2	a) egg → larvae→ pupae→adult
b) State <b>TWO</b> common breeding sites of fruit flies	3	b)

		<ul style="list-style-type: none"> <li>• rotting vegetable matter</li> <li>• rotting fruit</li> <li>• the residue in empty milk or beer containers</li> <li>• kitchen refuse areas</li> </ul> <p>fruit packing plants</p>
<p>a) State TWO locations where mosquitoes are likely to breed in a domestic environment</p> <p>b) Give THREE examples of how individuals in the community can act to reduce the incidence of mosquitoes on their property</p>		<p>a) Blocked gutters</p> <p>Uncovered water butts</p> <p>Garden ponds</p> <p>b) No standing water</p> <p>Unblocking gutters,</p> <p>Covering water butts</p> <p>Garden ponds stocked with fish</p>
<p>a) Which ant (other than the garden ant (<i>Lasius niger</i>) is most likely to infest warm buildings such as hospitals, office blocks, bakeries, etc</p> <p>b) How is this ant able to transmit disease organisms from one part of a building to another?</p>	2	<p>a) Pharaoh's Ant</p> <p>b) Small size, foraging, able to get into sterile dressings and wounds</p>
<p>a) What would be a likely source of an infestation of red poultry mites in a domestic bedroom?</p> <p>b) What might cause red poultry mites to become a problem in domestic situations?</p>	3	<p>a) Birds' nests in eaves or chimneys or in window ledges.</p> <p>b) Birds leaving nest. Need other source of food</p>
	2	

<p>a) Name <b>ONE</b> disease which fleas may spread What areas require treating to eradicate fleas in a domestic property.</p>	<p>1 4</p>	<p>Bubonic plague, myxamatosis</p> <p>Pet bedding and sleeping areas require special attention, pet should also be treated, but by vet not pest controller. Soft furnishings.</p>
<p>A householder complains to you that she has a severe infestation of biting insects in her house despite the absence of pet animals. Detailed investigations including intensive monitoring have failed to confirm the presence of any form of pest activity, and there is no visual evidence of bites on the person's skin,</p> <p>a) What action should a pest controller take as a result of this? b) What action should a pest controller <b>NOT</b> take?</p>	<p>3 2</p>	<p>a) Check for signs of bird mite in the roof space etc of the house Report case to your line manager for further action Recommend diplomatically that the householder contacts her health visitor/GP/practice nurse to discuss a medical resolution – possible allergic reaction to biological washing powder or a psychological condition – delusory parasitosis</p> <p>b) Decline to carry out any form of residual treatment involving the use of chemicals e.g. insecticides</p>
<p>a) Name <b>THREE</b> parts of a domestic house in which cluster flies may hibernate</p> <p>b) Name <b>ONE</b> other insect which exhibits the same activity as a cluster fly</p>	<p>3 2</p>	<p>a) Roof void. Cavity walls. Voids around window frames.</p> <p>b) Autumn fly, fen fly</p>
<p>How may changing the frequency of rubbish collection from weekly to monthly affect the development of an infestation of flying insects?</p>	<p>5</p>	<p>Longer collection period would allow the insects to complete their whole life cycle, thereby, continuing the infestation.</p>
<p>a) A resident reports that a swarm of honeybees has just appeared on a bush in their garden. State <b>THREE</b> options for dealing with this.</p> <p>b) A honeybees' nest in a cavity wall of a house has been carefully treated with insecticide. List <b>TWO</b> problems that may occur if no further measures are taken:</p>	<p>1 each          2</p>	<p>a) <i>(Treat with an approved insecticide; Get a bee-keeper to take it away; Wait for it to go away by itself)</i></p> <ul style="list-style-type: none"> <li>• b) <i>(Honey may cause damp and mould etc. Other honeybees may rob the honey and be killed by the insecticide, may attract wasps) [ 2 marks]</i></li> </ul>

A treatment for bedbugs using a synthetic pyrethroid insecticide proves ineffective. Apart from diatomaceous earth, what alternative treatments could be considered?	5	Carbamates, heat treatment
State <b>TWO</b> factors which should be considered when siting an electronic fly killer.	2.5 each	Will its performance be affected by competing UV light? Will it attract pests across food or other vulnerable surfaces? Will it attract insects into the premises rather than simply controlling those present? Coverage, access for maintenance
Why is it not good practice to lay traps for cockroaches immediately following a spray treatment?		Cockroaches take several hours to die, so trap is catching dying insects, not good indicator of activity
Why should an emulsion insecticidal formulation not be used on an absorbent surface?	5	The emulsion would soak in and the insecticide would not be available.
Explain the term “domino reaction”  [or “cascade effect”] when referring to particular insecticide treatments	5	“Domino reaction” / “cascade effect” generally refers to the ability of an insecticide to kill other insects within a pest colony without them directly contacting the insecticide e.g. by cannibalism, feeding on droppings of contaminated insects etc. Secondary poisoning
Give <b>TWO</b> reasons why it is good practice to recover baits following an insecticide treatment.	5	Primary poisoning Resistance Impact on environment H&S

Unit 3

<p>a) Under Health &amp; Safety legislation what is a “permit to work”.</p> <p>b) Describe an area in a pest control work activity where such a permit would be appropriate.</p>	5	<p>a) A permit to work is a document issued after a formal check has been undertaken by site management to ensure all elements of a safe system of work are in place before work is carried out.</p> <p>b) Confined spaces - ducting systems; Hazardous areas e.g. with factory environment etc.</p> <ul style="list-style-type: none"> <li>• Lone working</li> <li>• Working at height</li> </ul>
<p>(a) What does the abbreviation BPR on a product label stand for?</p> <p>(b) The product label states that “appropriate PPE” should be worn. Name TWO sources that could be used to check if the PPE that is available is suitable?</p>	1 4	<p>a) Biocidal Products Regulations</p> <p>b) safety data sheet PPE supplier product manufacturer/distributor</p>
<p>The Control of Substances Hazardous to Health Regulations 2002 (COSHH) impose certain duties on employers to protect employees.</p> <p>State TWO other principal duties required by the Regulations.</p>		<p>Any one from</p> <ul style="list-style-type: none"> <li>• assessing the risks to health arising from hazardous substances at work and deciding what precautions are needed,</li> <li>• preventing or adequately controlling exposure to harmful substances,</li> <li>• ensuring that control measures are maintained, examined and tested,</li> <li>• Monitoring exposure,</li> <li>• ensuring that employees are properly informed, trained and supervised.</li> </ul>
<p>List FIVE hazards that a pest controller may be exposed to in the roof space of a house.</p>	5	<p>Bump hazard Fall hazard Trip hazard Electrocution hazard Respiratory hazard</p>



<p>a) List <b>THREE</b> visual checks that should be made before using a ladder</p> <p>What regulation affects the use of ladders in the workplace?</p>	<p>3 2</p>	<p>Rubber base pads Not bent Fixed brackets</p> <p>(Need additional possible answers, suggest: is it long enough, ground is even)</p> <p>Working at height Regs 2005</p>
<p>State <b>TWO</b> objectives of the Food and Environment Protection Act, 1985</p>	<p>5</p>	<p>1. To protect the health of human beings, creatures and plants 2. To safeguard the environment 3. To secure the safe, efficient and humane methods of controlling pests 4. To make information about pesticides available to the public</p>
<p>Section 11 (1) of the Wildlife &amp; Countryside Act 1981 prohibits the use of certain methods of taking and killing wild animals Name <b>TWO</b> of these methods.</p>	<p>5</p>	<p>Self locking snares; bows; crossbows; explosives other than ammunition for firearms. Automatic and semi-automatic weapons</p>
<p>a) List <b>THREE</b> actions that may be implemented by an enforcement officer in connection with food premises.</p> <p>b) Which piece of legislation places the responsibility for rabbit control on the owner of the land on which rabbits have their warrens?</p>	<p>3 2</p>	<p>Hygiene improvement notice Hygiene emergency prohibition notice Seizure of food Closure of premises</p> <p>Pests Act, 1954</p>
<p>a) In which Act of Parliament does it state grey squirrels have to be dispatched humanely and not released back into the wild?</p> <p>b) What is the reason for this??</p>	<p>2 3</p>	<p>a) Schedule 9 of the Wildlife and Countryside Act 1981</p> <p>b) The grey squirrel is regarded as an invasive non-native species. As such, the grey squirrel is regarded as a pest species and is afforded no protection</p>

<p>a) A premises infested with cockroaches is taking no control action. Which Act of Parliament would be the most appropriate to use for treatment enforcement?</p> <p>b) Who is responsible for enforcing this Act?</p>	<p>3 2</p>	<p>a) The Environmental Protection Act 1990</p> <p>b) The Local Authority</p>
<p>In addition to treatment records various other types of records relating to different aspects of a Pest Controller's work must be kept. Specify TWO different types of such records.</p>	<p>5</p>	<p>Store records; COSHH records; Customer information records; Disposal records. Risk assessments</p>
<p>Outline TWO reasons why up-to-date treatment records are important to a client.</p>	<p>2 x 2.5</p>	<p>Provides contact details for the pest management company. Recommendations for activities such as housekeeping and proofing Information about progress and effectiveness of treatment Client can use records to prove due diligence Location of pesticides, baits, traps etc.</p>
<p>A householder insists that rats are living in his roof space, despite a pest controller being unable to find any signs of infestation.  What action should the pest controller take in this situation?</p>	<p>5</p>	<p>None or a plain unpoisoned test bait. Tracking dust. Motion sensor camera.</p>
<p>A client demands that rodenticide is placed according to his/her requirements and that no further visits are necessary or acceptable. What should be the response?</p>	<p>5</p>	<p>It should be explained that rodenticidal practice is largely determined by the legal provisions of the label which also requires that further visit[s] are necessary if only to dispose of unused rodenticide and dead rodents</p>
<p>When you are writing a report before leaving the client's premises, the Hygiene Officer asks you not to include some serious criticism of housekeeping standards as it will get him into trouble. What is your response to this?</p>	<p>5</p>	<p>Avoid discussing issue with hygiene officer. Discuss with their manager.  Report should be accurate and truthful Report back to line manager.</p>