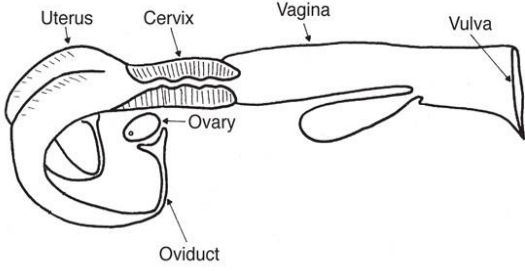


0171-510/010 Level 3 Agriculture – Theory exam (2) Livestock -March 2018

0171-33 Level 3 Advanced Technical Extended Diploma in Agriculture (1080)

Q	Acceptable answer(s)	Guidance	Max mks
1	1 mark for each of the following, maximum of 4 marks <ul style="list-style-type: none"> • Temperature • Respiration rate • Food intake/appetite • Water intake • Behaviour • Body condition • Discharge • Coughing • Faeces 	Accept any other suitable answer	4
2	a) 1 mark for each type of pathogen, up to 2 marks <ul style="list-style-type: none"> • Bacteria • Fungi • Virus • Parasite • Protozoa b) 1 mark for each example, up to 2 marks <ul style="list-style-type: none"> • Bacteria- salmonella • Fungi- ringworm • Virus- Bovine Viral Diarrhoea • Parasite- Nematodirus • Protozoa- toxoplasmosis 	Accept any other suitable answer	4
3	1 mark for each description, up to 4 marks <ul style="list-style-type: none"> • Movement restrictions • Slaughter of stock • Local farms movement restrictions • Loss of income • Public attitude to farming/ reduced sales. 	Accept any other suitable answer	4

	<ul style="list-style-type: none"> Any other suitable answer 		
4	<p>Small capillary lined air sacs within the lungs (1 mark)</p> <p>Site of oxygen and carbon dioxide exchange (1 mark)</p>	Accept any other suitable answer	2
5	<p>a) 1 mark each, up to 2 marks</p> <ul style="list-style-type: none"> Pituitary gland Pineal ovaries testes adrenal <p>b) 1 mark for each function, up to 2 marks</p> <ul style="list-style-type: none"> Pituitary gland-influences other organs in the body, produces several hormones including those for growth and reproduction Pineal – releases melatonin, regulates seasonal biology-reproduction/ coat growth ovaries –produces hormones for correct function of reproductive cycle testes- promotes production of sperm, growth of male sex organs, reproductive drive adrenal – control blood sugar, produces adrenaline – fight/ flight response 	Accept any other suitable answer	4
6	<p>4 marks for any description from the following, accept any other suitable answer</p> <p>Ruminant has four chambers (1) to the digestive system monogastric has one chamber(1) Ruminant uses a fermentation process (microflora /bacteria) to breakdown or convert cellulose (plants)(1), monogastric uses acids and enzymes to breakdown food (1) Ruminants are always herbivores (1) but monogastric show various types of food habits (1)</p>	Accept any other suitable answer	4
7	<p>Answer</p> <p>A- Oviduct B- Ovary C- Uterus D- Cervix E- Vagina</p>		6

	<p>F- Vulva</p> 		
8	<p>a) 1 mark for each of the following, up to 2 marks</p> <ul style="list-style-type: none"> • Direct injection • Trailing shoe • Band spreader <p>b) 1 mark for each of the following, up to 2 marks</p> <ul style="list-style-type: none"> • Produces electricity / renewable energy • Residue can be used as fertiliser 	Accept any other suitable answer	4
9	<p>The GPS system uses satellite signal (1) to locate the correct distance from water courses (1).</p> <p>Nutrient maps uses soil analysis information (1) which then indicates where to apply the fertiliser (1) therefore reducing the risk of pollution (1)</p> <p>Greenhouse gas emissions is reduced (1)</p>	Accept any other suitable answer	6
10	<p>1 mark each</p> <ul style="list-style-type: none"> • Date of service • Serial/ registration numbers • Future service date • Type of service 	Accept any other suitable answer	3
11	<ul style="list-style-type: none"> • Safe load indicator in the cab • Falling object protection structure • Torque converter transmission • Windscreen guard • Four-wheel steering • Crab steering • Telescopic boom extension • Hydro static transmission • Joystick control. 	Accept any other suitable answer	3

12	<ul style="list-style-type: none"> • By completing a risk assessment • By wearing PPE • By carrying out the correct training • By carrying out the correct load management • By following manufacturer's guidelines/ operator instructions • By adjusting to ground conditions • Public access/ other staff 	Accept any other suitable answer	4
13	<p>Band 1: 1 – 4 marks There is limited knowledge of nutrition and the breeding cycle from across the breadth of the qualification. There is a general lack of understanding of the topics. The candidate has made some errors.</p> <p>Band 2: 5 – 8 marks Evidence of knowledge of nutrition and the breeding cycle from across the breadth of the qualification is good. Reasoning for the importance of nutritional management mostly correct. A range of stages of the breeding cycle has been referred to in a structured way.</p> <p>Band 3: 9 – 12 marks The candidate has shown excellent knowledge of nutrition and the breeding cycle from across the breadth of the qualification. Reasoning for the importance of nutritional management correct. All stages of the breeding cycle have been referred to in a logical structure.</p>	<p>Indicative content</p> <ul style="list-style-type: none"> • Preparation for breeding – rising plane of nutrition, aim to get correct body condition, • Gestation – body condition, vitamins and minerals, litter size • Parturition - body condition, deficiencies, supplementation • Lactation – level of production, quantity of food, colostrum quality <p><i>For no awardable content, award 0 marks.</i></p>	12