

Study & Master

Support Pack | Grade 12

A circular logo with the word 'CAPS' in a bold, sans-serif font, surrounded by a double-lined border.

Module 5 Unit 5

Agricultural Sciences

Animal reproduction

This support pack for the **Animal reproduction** module in the **Agricultural Sciences Grade 12 CAPS curriculum** provides valuable revision activities. All activities have the answers provided. Learners can work through these individually at home or these could form the basis of a catch-up class or online lesson. You have permission to print or photocopy this document or distribute it electronically via email or WhatsApp.

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Module 5 – Animal reproduction

Unit 5 Birth (parturition) and dystocia

Short questions

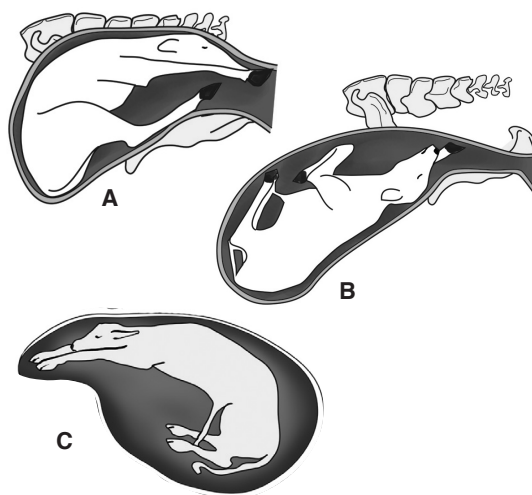
1. Various possible answers are provided for the following questions. Write only the correct letter (A–D) next to the question number.
 - 1.1 The protects the embryo against shock and serves as a lubricant during parturition.
 - A amnion
 - B chorion
 - C allantois
 - D placenta
 - 1.2 A visible sign shown by a cow that is about to give birth is that it
 - A searches for a bull
 - B attempts to urinate and defecate frequently
 - C prefers feeding on concentrates
 - D stays with the calves
 - 1.3 The is attached to the embryo at the naval by means of the umbilical cord.
 - A chorion
 - B amnion
 - C placenta
 - D allantois
 - 1.4 The level of the hormone increases during the preparatory stage of parturition causing contraction of the muscular uterine wall and preparation for the expulsion of the foetus.
 - A oestrogen
 - B progesterone
 - C oxytocin
 - D adrenaline
 - 1.5 Which ONE of the following is not a function of the umbilical cord?
 - A Carbon dioxide and waste products diffuse from the blood of the foetus to the blood of the mother.
 - B Arteries transport blood to the placenta.
 - C Veins transport blood to the embryo.
 - D Oxygen and nutrients diffuse from the mother's blood to the foetus's blood through arteries. 5×2 (10)
2. In the table below a description and TWO possible answers are given. Decide whether the description in column B relates to A only, B only, both A and B or neither A nor B of the answers in column A.

Column A			Column B
2.1	A	Pregnancy	Period that starts with fertilisation of the ovum by the sperm and ends with parturition
	B	Gestation	
2.2	A	Relaxin	Hormone responsible for relaxation of the cervix and pelvic muscles during parturition
	B	Oestrogen	
2.3	A	Oestrogen	The level of this hormone drops when the female has given birth to the offspring
	B	Progesterone	
2.4	A	Dystocia	Reasons for retention of the placenta after parturition
	B	Abortion	
2.5	A	Dystocia	The foetus lies on its abdomen with its forefeet and nose stretched towards the pelvis and its head resting on its forefeet
	B	Presentation	

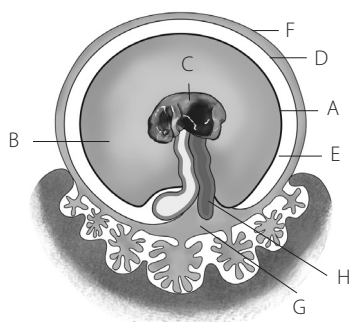
5×2 (10)

Longer questions

3. Study illustrations A, B and C and then answer the following questions with regard to the parturition process.



- 3.1 Name the three stages in the parturition process in the correct order. (3)
 - 3.2 Which illustration represents the normal birth position? (1)
 - 3.3 Identify the condition that will occur when the foetus in picture A must be delivered. (1)
 - 3.4 Name the structure that regresses when prostaglandins are released during the first parturition stage. (1)
 - 3.5 Briefly explain how the regression of the structure mentioned in 3.4 affects the levels of the hormones oestrogen and progesterone. (2)
4. Study the illustration below and then answer the questions with regard to the parturition process.



- 4.1 Write down the letter and name of the membrane surrounding the foetus that ruptures during the first parturition stage. (2)
- 4.2 Write down the letter and name of the membrane that ruptures during the second parturition stage. (2)
- 4.3 Write down the letters and names of the two membranes that fuse and attach the embryo to the endometrium in the uterus. (4)
- 4.4 Write down the letter and name of the organ formed from the fusion of the two membranes mentioned in 4.3. (2)
- 4.5 Name TWO functions of the organ mentioned in 4.4. (2)

Memorandum

Unit 5

Short questions

1.1	A	1.2	B	1.3	C	1.4	A	1.5	D	(10)
2.1	A and B	2.2	A	2.3	B	2.4	A and B	2.5	B	(10)

Longer questions

- 3.1 Preparatory stage, delivery stage (ejection of foetus), expulsion of placenta (afterbirth) (3)
- 3.2 C (1)
- 3.3 Dystocia (1)
- 3.4 Corpus luteum (1)
- 3.5 Oestrogen level increases; progesterone level decreases (2)
- 4.1 D – Allantois (2)
- 4.2 A – Amnion (2)
- 4.3 D – Allantois; F – Chorion (4)
- 4.4 G – Placenta (2)
- 4.5 Functions of placenta (any two):
- Attaches the embryo to the uterus wall
 - Brings the blood vessels of the mother and embryo close together
 - Diffusion of oxygen and nutrients from the maternal blood to the foetal blood through veins
 - Diffusion of carbon dioxide and waste products from the foetal blood to the maternal blood (2)