Mark schemes

Q1.

[AO1 = 4]

Level	Marks	Description
2	3-4	Outline of how Harlow studied attachment using animals is clear, accurate and has some detail. The answer is generally coherent with effective use of terminology.
1	1-2	Outline of how Harlow studied attachment using animals is evident but lacks clarity and/or detail. The answer as a whole is not clearly expressed. Terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- in a controlled environment, infant monkeys reared with two mother surrogates
- plain wire mother dispensing food, cloth-covered mother with no food
- time spent with each mother was recorded
- details of fear conditions
- long-term effects recorded: sociability, relationship to offspring, etc.

Accept relevant detail of procedure embedded in findings.

Credit other relevant procedural details and procedures from other relevant studies by Harlow.

[4]

Q2.

[AO3 = 4]

Level	Marks	Description
2	3-4	Explanation of one limitation of using animals to study attachment in humans is clear and has some detail. The answer is generally coherent with effective use of terminology.
1	1-2	Explanation of one limitation of using animals to study attachment in humans lacks clarity and/or detail. The answer as a whole is not clearly expressed. Terminology is either absent or inappropriately used.
	0	No relevant content.

Possible limitation:

- problems of extrapolation to attachment in human infants – what applies to non-human species may not also apply to human infants
- difference in nature and complexity of the bond
- human mothers show more emotional attachment to the young than birds
- humans may be able to form attachments at any time
- DNA differences/human brain size differences may reduce generalisability.

Answers may be focused on one particular study.

Credit other relevant limitations.

If a candidate gives more than one relevant limitation credit the best.

No marks for ethical issues.

[4]

Q3.

[AO1 = 6 AO3 = 10]

Level	Marks	Description
4	13-16	Knowledge of Lorenz's and Harlow's animal studies is accurate and generally well detailed. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9-12	Knowledge of Lorenz's and Harlow's animal studies is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5-8	Limited knowledge of Lorenz's and Harlow's animal studies is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. OR Lorenz or Harlow only at Level 3/4.
1	1-4	Knowledge of Lorenz's and Harlow's animal studies is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used. OR Lorenz or Harlow only at Level 1/2.
	0	No relevant content.

Possible content:

- Lorenz's procedure and findings – goose eggs randomly divided; half hatched with the mother present (in natural environment); half in an incubator with Lorenz present; behaviour recorded; incubator group followed Lorenz, control group followed the mother; concepts of imprinting and critical period
- Harlow's procedure and findings – in a controlled environment, infant monkeys reared with two mother surrogates; plain wire mother dispensing food, cloth-covered mother with no food; time spent with each mother was recorded; details of fear conditions; long-term effects recorded: sociability, relationship to offspring, etc; preference for contact comfort over food; long-term effects on sociability and own childrearing style
- credit also references to Lorenz's work of sexual behaviour/imprinting.

Possible discussion points:

- problems of generalising findings from animal studies to humans – argument that, of the two, Harlow's study (mammalian species) may be more relevant to human experience

- implications of imprinting/critical period for human attachment (Lorenz) – 'window of opportunity' in which attachments must be formed otherwise this may lead to negative long-term consequences (credit reference to Bowlby's work in this context, eg maternal deprivation)
- implications of early neglect (Harlow) – long-term consequences of poor attachment in childhood for future relationships, eg with own children (again, credit reference to Bowlby in this context – internal working model)
- argument that the critical period may be more of a 'sensitive period' in humans as studies have demonstrated how children have been able to recover from early deprivation, eg Romanian orphan studies
- practical value of research, eg for social work, identifying risk factors in vulnerable children
- implications for theories of attachment, eg Harlow's suggestion that contact comfort/sensitive responsiveness is more important than food contradicts learning theory
- support from human studies, eg Schaffer and Emerson Glasgow study supports the idea that responsiveness may be more important than food.

Only credit ethical issues if made relevant to discussion of human attachment.

[16]

Q4.

[AO1 = 5]

Level	Mark	Description
3	4-5	Description of how Lorenz studied attachment in animals is clear and has some detail. The answer is generally coherent with appropriate use of terminology.
2	2-3	Description of how Lorenz studied attachment in animals is evident but lacks clarity. Terminology is used appropriately on occasions.
1	1	Very brief or muddled description of how Lorenz studied attachment in animals. Terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- randomly divided a clutch of goose eggs
- half-hatched in an incubator and the first 'thing' they saw was Lorenz
- half-hatched with their mother
- once hatched the two groups were mixed up and Lorenz observed who/what they followed
- he varied the time between birth and seeing a moving object so he could measure the critical period for imprinting
- also credit reference to the case study of sexual imprinting in a peacock.

Credit other relevant descriptions.

[5]