Baillargeon - Mark Scheme

Q1.

[AO1 = 1]

1 mark for 'what is expected is not what happens'.

Answer can be general as above or set in the context of a specific study, eg tall carrot / short carrot study or truck / flap study.

Q2.

(a) **[AO1 = 3]**

Up to 3 marks for description of a valid way, one mark for each relevant detail. Full mark answers should refer to the method and DV / what was being measured (do not credit aims / conclusions). Likely answers include: studies object permanence / concept, eg Piaget's (1951) study of Jacqueline's responses to taking the toy, the A not B error extension of this study; Bower and Wishart's infra-red camera studies (1972); Meltzoff and Borton (1979) cross-modal integration research; Baillargeon's impossible event studies (carrot, truck, cube); Bower (1970) looming studies.
More generic methodological answers which cannot be identified as a specific study (either by name or description) may gain a maximum of two marks.

(b) **[AO3 = 3]**

Up to 3 marks for evaluation of the way described in 05. Students who present an inappropriate study or no study in 05 may still gain marks in 06 where it becomes clear that a specific study / way of investigating infant cognitive abilities is being evaluated. Students may choose to elaborate on one issue or may mention more than one issue in less detail. Evaluative points will vary according to the method described but likely issues include: usefulness of controlled experimentation in researching infant abilities – reliability issues; inferences based on findings, eg validity of surprise / looking time as a dependent variable to infer the existence of object concept.

For full marks evaluative point(s) must be fully applied to the study of early infant abilities. One mark only for a totally generic but valid response.

Q3.

[AO1 = 6 AO3 = 10]

Level	Marks	Description
4	13 – 16	Knowledge of what Baillargeon's research has told us about early infant abilities 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 what Baillargeon's research has told us about early infant abilities 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 what Baillargeon's research has told us about early infant abilities 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.
1	1 – 4	Knowledge of what Baillargeon's research has told us about early infant abilities 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.
	0	No relevant content.

Possible content:

- focus on infants' knowledge of the physical world
- investigations of core knowledge theory (focus on object representation); infants have an innate, hard-wired physical reasoning system enabling object perception and representation
- violation of expectation studies ' familiarisation with possible events (habituation stage) introduction of impossible events (expt stage); use of looking time to indicate surprise that expectation has been violated
- specific studies, eg tall/short rabbit and window (Baillargeon and Graber 1987) drawbridge and box (Baillargeon 1995); truck and ramp (Baillargeon 1987); tall/short carrot and window (Baiilargeon and DeVos 1991); Minnie Mouse (Aguiar and Baillargeon 1999)

Possible discussion:

- challenge to Piaget's age at which infants can represent objects (Piaget's view that object permanence arises at approx. 8 months)
- Baillargeon's improvements on Piaget's object permanence studies
- infants in Baillargeon's research (approx. 2½ months+) – not new-born
- implications of accepting view that ability to reason about physical world is innate; basic pre-programming enables rapid learning and so confers survival value; focus on novel/unusual facilitates survival
- parallels between Baillargeon's view of an innate physical reasoning system and other theories about innate abilities, eg Chomsky's innate language acquisition device
- discussion of scientific value of Baillargeon's paradigm including: use of infants in controlled experiments: reliance on inference and the interpretation of 'looking' and 'surprise' as dependent variables
- alternative interpretations, eg infants observe 'difference' rather than show 'surprise' (Schöner and Thelen 2004); results show attraction to novel/engaging stimuli rather than surprise (Cashon and Cohen 2000)
- wider issues and debates, eg nature v nurture, biological determinism.

Only credit methodological issues if used to discuss findings.

Credit other relevant material.