

NATURAL SCIENCES TRIPOS Part IB
NATURAL SCIENCES TRIPOS Part II (General)
NATURAL SCIENCES TRIPOS Preliminary Examination for Part II Psychology

Thursday 31 May 2007

9.00 to 12.00

EXPERIMENTAL PSYCHOLOGY I

Answer ALL questions.

Each section carries equal marks.

Within each section the first question carries one third of the marks available and the second questions carries two-thirds of the marks. Candidates are advised to allocate their time to each question accordingly.

Answers from each Section must be tied up in a separate bundle, with the letter of the Section written on each cover sheet.

*Write your number **not** your name on the cover sheet for each Section.*

STATIONERY REQUIREMENTS

Loose script paper

Cover sheets

You may not start to read the questions printed on the subsequent pages of this question paper until instructed that you may do so by the Invigilator.

SECTION A

1. *Give a short account of TWO of the following:*
 - (a) d'
 - (b) Inhibition of return
 - (c) Depth cues
 - (d) The Craik-Cornsweet illusion

2. *Write an essay to answer ONE of the following questions:*
 - (a) What are the principles of univariance and adaptive independence? What implications do they have for the study of vision?
 - (b) Can we do two things at once without cost?

SECTION B

3. *Give a short account of TWO of the following:*
 - (a) The function of the orbito-frontal cortex
 - (b) Neglect
 - (c) Retrograde amnesia
 - (d) The James-Lange theory of emotion

4. *Write an essay to answer ONE of the following questions:*
 - (a) Is language represented in the left hemisphere of the brain? Evaluate evidence from both healthy and brain-damaged individuals.
 - (b) Distinguish between classical and instrumental conditioning and discuss the role of 'habits' in the latter.

SECTION C

5. *Give a short account of TWO of the following:*
 - (a) Object permanence in infants
 - (b) Memory in infants
 - (c) Reasoning in adolescence and adulthood
 - (d) Special Constraints theory

6. *Write an essay to answer ONE of the following questions:*
 - (a) What did Piaget mean by 'concrete operational' thinking? Was he right to claim that it constitutes a distinct stage of mental development?
 - (b) Evaluate the claim that children acquire a 'theory of mind' around the age of four years.

END OF PAPER