

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the June 2005 question paper

0637 CHILD DEVELOPMENT

0637/01

Paper 1, maximum raw mark 100

These mark schemes are published as an aid to teachers and students, to indicate the requirements of the examination. They show the basis on which Examiners were initially instructed to award marks. They do not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the *Report on the Examination*.

- CIE will not enter into discussion or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the June 2005 question papers for most IGCSE and GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Grade thresholds for Syllabus 0637 (Child Development) in the June 2005 examination.

	maximum mark available	minimum mark required for grade:			
		A	C	E	F
Component 1	100	75	53	42	30

The threshold (minimum mark) for B is set halfway between those for Grades A and C.
The threshold (minimum mark) for D is set halfway between those for Grades C and E.
The threshold (minimum mark) for G is set as many marks below the F threshold as the E threshold is above it.

Grade A* does not exist at the level of an individual component.

June 2005

IGCSE

MARKING SCHEME

MAXIMUM MARK: 100

SYLLABUS/COMPONENT: 0637/01

CHILD DEVELOPMENT
Paper 1

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SECTION A

- 1 (a) Basic unit of society.
Usually related by birth, marriage or adoption. [2 x 1]
- (b) Extended family
Nuclear family
One parent family
Step – families
Shared – care families
Foster families any 3 [3 x 1]
- 2 (a) Testes
- (b) Ovary [2 x 1]
- 3 Contraception: sperm and egg prevented from meeting
Ovulation prevented
Fallopian tubes or sperm ducts cut etc.

Or three different methods of contraception [3 x 1]
- 4 (a)
 - Low sperm count
 - Failure to ovulate
 - Blocked fallopian tubes
 - Cervical mucus too thick
 - Hysterectomy any 3 [3 x 1]
- (b)
 - Fertility drugs
 - Operation to unblock fallopian tubes
 - I.V.F.
 - Donor insemination
 - Garnete Intra – fallopian transfer
 - Intra – Cytoplasmic sperm injection
 - Surrogacy any 2 [2 x 1]
- 5 (a) Identical twins:
Develop when a fertilised egg splits into two parts and each develops into an individual.

Non identical :
Two eggs are released instead of one, and each is fertilised by a different sperm. [2 x 2]
- (b) Enjoyment of two babies at once. Family complete with one pregnancy etc. [2 x 1]
- 6 Weaning :
Gradual change over from a diet of milk to a variety of foods, both solid and liquid. [1]
- 7 Nature:
Inherited intelligence/skills and abilities

Nurture:
Environmental influence on development [2 x 1]

Page 2	Mark Scheme	Syllabus	Paper
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- 8
- Sight
 - Hearing
 - Smell
 - Taste
 - Touch
- [4 x 1]

- 9
- Production of milk
Occurs 3 – 5 days after baby is born
- [2 x 1]

[Total: 30]

SECTION B

- 10 (a) Any four, 1 mark for reason, 1 mark for suitable way of comforting.
- Hunger – feed on demand (2 – 5 hours after last feed).
Thirst – give boiled then cooled water.
Discomfort – check nappy, temperature too hot or cold, light in eyes etc.
Pain – if continuous, and ‘cuddling’ and holding does not comfort child; see doctor.
Tiredness – ‘rock’ to sleep; leave to see if cries herself to sleep.
Dislike of the dark – leave on a dim light.
Loneliness – pick up and cuddle etc.
Colic – pick up and cuddle etc., difficult to comfort.
Boredom – carried around; prop up in pram; bouncing cradle.
Noise – try to prevent sudden noises – cuddle; reassure.
‘Baby manage’ may be used in most of above, as may soothing music.
- [8]
- (b) Approximately 1 year [2]
- (c)
- Inherited pattern of development
 - Other aspects of development may have come first
 - Lack of individual attention from adults
 - Lack of encouragement
- [4 x 1]
- (d) Any two examples – must be explained for 2 marks each:
Conversation, stories, rhymes and jingles. [2 x 2]
- (e)
- Read stories to child
 - Talk about stories and pictures
 - Know some nursery rhymes
 - Know that books are fun
- [4 x 1]
- (f) Board book: sturdy – can withstand being in babies mouths
- Texture book: encourage a child to be aware of the sense of touch
- Cloth book: washable and strong
- One example of each [3 x 1]

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- 11 (a)**
- Enables child to find out
 - Helps towards happiness
 - Helps to prevent boredom
 - Helps to reduce stress
 - Helps to divert aggressive instincts
 -
- Each benefit must be explained for 2 marks **[5 x 2]**
- (b)** One mark for each type plus one mark for suitable example.
Any four from:
- Discovery play
 - Physical play
 - Creative play
 - Imaginative play
 - Manipulative play
 - Social play
- Any suitable examples **[4 x 2]**
- (c)** 1–2 years – bricks, picture books, push and pull toys, bells, beads etc.
- 2–3 years – toys that ‘unscrew’, posting box, pegboard and hammer, board colours etc.
- 3–5 years – drawing and painting sets, dressing up clothes, climbing frames, tricycles etc.
- Two examples of each **[3 x 2]**
- (d)** Activity mat, squeakers, rattles etc. **[1]**
- 12 (a)**
- Sore gums
 - Increased dribbling
 - Increased fist chewing
 - Red cheek
- [4 x 1]**
- (b)**
- Cuddled and comforted
 - Divert attention by giving different play ideas
 - Going for a walk
 - Playing music
 - Telling a story/talking
 -
- Three ideas or two well explained **[3]**
- (c)** Milk teeth **[1]**

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- (d) Fluoride – toothpaste, water supply, drops or tablets
- Calcium – milk, cheese, white bread, yoghurt, green vegetables etc.
- Vitamin A – milk, butter, margarine, carrots, green vegetables etc.
- Vitamin C – fruit and vegetables, breast milk etc.
- Vitamin D – margarine, butter, oily fish, eggs etc.
- Any 4 – 1 for substance, 1 for example of each **[8 x 1]**
- (e) Bacteria in mouth plus sugar from food acid which causes tooth decay **[3]**
- (f) Too much fat and sugar can cause obesity:
- More prone to pick up infections
 - Difficult to break habit of early sweet foods
 - Creates a life long problem
 - Sugar causes tooth decay
- Causes malnutrition:
children are not eating a balanced diet, so may develop deficiency diseases, some additives may cause side effects, e.g. hyperactivity.
- Any 3 well explained points **[6]**

SECTION C

- 13 A higher level response will include full responses from each section. **[13–20]**
- A medium level response will either fully respond to one aspect and briefly the other section, or respond to each section, but without full explanations and discussing advantages. **[7 – 12]**
- A low–level response will consist of a brief answer to one or both sections. **[1 – 6]**
- (a) Answers could include:
- A first baby
 - A multiple birth
 - A fifth or subsequent birth
 - History of complications
 - Previous stillbirth
 - Narrow/misshapen pelvis
 - Very large/very small/premature baby
 - A very young mother
 - A very overweight expectant mother
 - Mother over 35 years old
 - Known medical problems e.g. diabetes
 - Previous operations on reproductive organs or caesarean section

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- (b) Home Birth :
- All family involved
 - Mother more relaxed in own home
 - No transportation required
 - Midwife can bring 'TENS', gas and air, and pethidine to the house
 - Can sometimes hire a birth pool for home
 - Freedom to move about anywhere in the home
 - Midwife can carry out an episiotomy if required
 - Mother can determine her own routines and meal times
 - May experience less interference
 - Can build up good relationship with the midwife who will deliver baby at home

Hospital Birth:

- Trained staff available
- Equipment and staff available
- Forceps, ventouse, caesarean deliveries have to be carried out in hospital
- Epidural only available in hospital
- Emergency caesarean only available in hospital
- Parents reassured by 'Safe environment'
- After birth mother has constant support by midwives
- Midwives can give mother a break
- Can share experiences with mothers
- No worries of home life

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A higher level response will include full responses:

- Inborn temperament – requires more careful handling than those who are placid by nature
- A child who has been made to feel extra special – due to being difficult to conceive/premature/delicate as a baby/or has been seriously ill
- Lack of parental control and guidance:
 - Parents who lack parental skills
 - Parents stressed by unemployment, lack of money, housing problems
 - Crisis in the family causing unsettlement for whole family
 - Parent having to look after another family member
- Wrong type of diet

Strategies:

- Praise and encouragement for good behaviour, e.g. smiling/cuddling/friendly touches/enthusiasm/praising/joining in play with child's consent
- Cut down on constantly telling child what to do – only give instructions when absolutely necessary
- Try to say 'No' only when really required
- Do not criticise
- Introduce a balanced diet