

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**  
International General Certificate of Secondary Education

**MARK SCHEME FOR the November 2002 question papers**

**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 discussions or correspondence in connection with these mark schemes.

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UNIVERSITY of CAMBRIDGE  
Local Examinations Syndicate

**November 2002**

**INTERNATIONAL GCSE**

**MARK SCHEME**

**MAXIMUM MARK : 100**

**SYLLABUS/COMPONENT : 0637/01**

**CHILD DEVELOPMENT**



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Section A

1. ONE mark for each correct answer. TWO requires e.g.

Give support and protection  
 Be smooth inside  
 Wide enough to allow toes to move/ rounded front  
 Room for growth  
 Adjustable fastening  
 Flexible uppers  
 Light and flexible soles/non-slip  
 Firm fitting heel  
 Low heel  
 Reputable supplier  
 Leather allows foot to breathe.

[2]

2. ONE mark for each correct answer FOUR required e.g.

Bath mat  
 Clean nappy/liner/pins  
 Clean towel  
 Clothing  
 Soap/babybath/infracare  
 Shampoo  
 Cotton wool  
 Talcum powder  
 Nappy cream  
 Changing mat  
 Bath toys

[4]

- 3 (a) ONE mark for each correct answer TWO required e.g.

High blood pressure [1 mark] can lead to pre-eclampsia/toxemia [1 mark]  
 High blood pressure [1 mark] can be fatal for the baby and the mother [1 mark]

[2]

- 3 (b) ONE mark for each correct answer TWO required eg.

Check on the rate of growth/growing ok/height of fundus  
 Baby's size  
 Baby's position  
 Listening to heartbeat/ear trumpet

[2]

- 4 (a) ONE mark for each correct answer TWO required e.g.

Relaxation and breathing exercises  
 Gas and oxygen/entenox  
 Acupuncture/reflexology - ONE alternative method only  
 Tens  
 Pethidine  
 Epidural anaesthetic  
 Water birth  
 Aromatherapy

[2]

- 4 (b) ONE mark for each correct answer TWO required e.g.

A show/discharge of mucus and blood  
 Waters breaking/amniotic fluid coming away  
 Regular and strong contractions

[2]

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5. ONE mark for each correct answer FOUR required e.g.

Easy for some  
 Safe/clean  
 Uterus contracts quickly  
 Free  
 Contains antibiotics  
 bonds of affection  
 Never causes indigestion  
 Less likely to become overweight  
 Less likely to develop nappy rash  
 Less likely to develop eczema  
 Less likely to be constipated  
 Convenient/available  
 Correct temperature

[4]

6. ONE mark for each correct answer THREE required e.g.

Bars should be no more than 6cms apart  
 Mattress should fit/no gaps at the sides  
 Stability  
 Drop side cots should have a secure catch  
 Strong/durable/sturdy  
 New mattress/holes in mattress  
 Lead free paint

[3]

7. ONE mark for each correct answer TWO required e.g.

Inherited genes  
 State of health  
 Amount of encouragement and interest shown by the parents/carers  
 Environment

[2]

- 8 (a) ONE mark for each correct answer THREE required e.g.

Solitary/alone  
 Parallel/side by side  
 Looking-on  
 Joining in  
 Co-operative/group

[3]

- 8 (b) ONE mark for each correct answer TWO required e.g.

Drawing a picture  
 Painting/crayons  
 Modelling with plasticine/playdough/clay/modelling clay  
 maing junk toys  
 Making a house from building blocks/bricks/lego/duplo  
 Sand and water

[2]

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9 ONE mark for each correct answer TWO required e.g.

Learn how to do the following:

- Fasten buttons
- Fasten zips
- Tie shoelaces
- Make bows
- Fasten hooks and eyes
- Fasten press studs together
- Fasten toggles
- Velcro
- Independence/confidence

[2]

### Section B

10 (a) (i) ONE mark for the correct answer  
Average age is 6 months 5-6 or 6-7

[1]

10 (a) (ii) ONE mark for the correct answer  
20 milk teeth

[1]

10 (a) (iii) ONE mark for each correct answer THREE required

- Sore gums/swollen
- Increased dribbling
- Increased fist chewing/chewing objects NOT biting or sucking
- Red cheek
- Increased crying

[3]

10 (a) (iv) ONE mark for each correct answer TWO required

- Cuddled/comforted
- Divert the baby's attention
- Chewing on something hard/rusks/carrot
- Extra fluids
- Teething gel
- No trade names

[2]

10 (a) (v) ONE mark for the correct answer  
5 years onward

[1]

10 (b) (i) TWO marks for the correct answer  
Fluoride combines chemically with the enamel of the teeth, making them stronger and more resistant to decay

[2]

10 (b) (ii) ONE mark for the correct answer  
Calcium/phosphorous - NOT fluoride

[1]

10 (b) (iii) ONE mark for each correct answer THREE required

- Milk
- Cheese
- Yoghurt
- White bread
- Green vegetables

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- 10 (c) ONE mark for the correct answer  
 Vitamin A, C or D  
 Must have correct vitamin to get marks for food sources [1]

ONE mark for the correct answer TWO required

Vitamin A:

Milk  
 Butter  
 Margarine  
 Carrots  
 Green vegetables

Vitamin C:

Green vegetables  
 Blackcurrants  
 Oranges  
 Lemons  
 Limes  
 Grapefruit  
 Raspberries

Vitamin D:

Milk/milk products  
 Margarine  
 Butter  
 Fish oils  
 Eggs [2]

- 10 (d) (i) TWO marks for the correct answer  
 Bacteria in the mouth + sugar in the food = attacks enamel - NOT Rot or go bad [2]

- 10 (d) (ii) ONE mark for each correct answer SIX required  
 Encourage child to hold a toothbrush from an early age  
 Teach child to brush teeth from the age of 1 year  
 Teeth should be brushed twice a day and especially before bed/regularly/after meals  
 Buy the child a toothbrush with a cartoon character on it for encouragement  
 Caring for teeth will become a lifetime habit  
 Avoid giving sugary drinks and sweets/reduce sweets  
 For snack foods provide apple, carrot or crusts  
 Take the child to the dentist with you so that they get used to it/take child to the dentist  
 Novelty toothpaste  
 Let them watch you  
 Books/videos  
 Role-play  
 Change every three months/buy a brush regularly [6]

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- 11 (a) (i) TWO marks for the correct answer  
They are substances which act as chemical messengers [2]
- (ii) ONE mark for the correct answer  
Endocrine glands [1]
- (iii) ONE mark for each correct answer TWO required  
Oestrogen  
Progesterone [1]
- (b) TWO marks for the correct answer  
An egg is released every month from one or other of the ovaries / releases egg  
Usually takes place around the 14<sup>th</sup> day or middle of the menstrual cycle.  
After being released the egg travels down the Fallopian tube. [2]
- (c) ONE mark for each correct answer SIX required  
1. Fallopian tube(s)  
2. Ovary  
3. Vagina  
4. Cervix  
5. Lining of the uterus  
6. Wall of the uterus / uterus [6]
- (d) ONE mark for each correct answer TWO required  
Menopause  
Poor diet  
Pregnancy  
Illness [2]  
Breast feeding
- (e) (i) ONE mark for the correct answer  
9 – 17 years [1]
- (ii) ONE mark for the correct answer  
28 days [1]
- fi) ONE mark for each correct answer FIVE required  
be in good health  
be free from infection  
not be overweight  
give up smoking  
give up alcohol  
not to take drugs or medication  
have a good nutritious diet  
folic acid  
genetic counselling [5]
- fii) ONE mark for each correct answer THREE required  
in case there is a family history of inherited illness.  
in case of a history of abnormalities  
when mother and father are closely related e.g. cousins  
when either mother or father may be carriers of an abnormal gene which may be inherited by  
the child and cause a disease or illness.  
one child already [3]

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- 12a) TWO marks for the correct answer  
The development of a child's ability to control her/his feelings [2]
- b) ONE mark for each correct answer TWO required  
Child's inborn temperament  
Environment / stability / security [2]  
State of health love shown / praise
- c) ONE mark for each correct answer THREE required  
Skin-to-skin contact / touching / holding / cuddling  
Eye-to-eye contact  
Familiar smells [3]  
Familiar sounds /talking  
breast feeding
- d) (i) ONE mark for each correct answer TWO required  
Child feeling:  
Insecure  
Unhappy  
Does not thrive physically  
Does not learn to deal with their emotions / tantrums / cannot show love  
Withdrawn  
Attention seeking /smacking / hitting / biting / aggressive [2]
- d (ii) TWO marks for correct answer  
When the child is over-protected, prevented from becoming independent, given too much love, not allowed to do things for themselves [2]



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- (iii) ONE mark for each correct answer THREE required  
 Constantly picking up the child  
 Not letting him/her play  
 Being over-anxious  
 Constantly worrying about how much the child is eating  
 Constantly worrying about the child's sleeping habits [3]  
 No discipline
- (e) (i) ONE mark for the correct answer  
 Dummy  
 Piece of cloth  
 Cuddly toy – anything suitable  
 Blanket [1]
- (ii) TWO marks for the correct answer  
 Provides comfort and security [2]
- (f) (i) TWO marks for the correct answer  
 Reverting to an earlier stage, e.g. child may have been dry at night, but suddenly starts wetting the bed. [2]
- (ii) TWO marks for the correct answer  
 Never smack or scold the child. Give extra love and attention. [2]  
 Be patient / praise / encourage
- (g) ONE mark for each correct answer FOUR required  
 Prepare the child for the new baby's arrival  
 Reassure often that he/she is loved and wanted  
 Avoid comparisons with the new baby  
 Encourage him/her to feel more grown up and independent  
 Involve the child when buying equipment for the new baby  
 Encourage the child to help, e.g. when bathing the new baby, to fetch items needed. [4]
- 13 (a) (i) TWO marks for the correct answer  
 Contraception is the deliberate prevention of pregnancy. [2]
- (ii) ONE mark for each correct answer TWO required  
 Male condom  
 Male sterilisation (vasectomy)  
 Abstinence  
 Withdrawal [2]
- (iii) ONE mark for each correct answer TWO required  
**Combined pill:**  
 Contains two hormones, oestrogen and progesterone.  
 Stops the ovaries from producing eggs.  
 Usually taken for three weeks at a time and then one week off.  
 Does not have to be taken at exactly the same time every day – within 12 hours.  
**Mini-pill:**  
 Contains one hormone, progesterone.  
 Alters the lining of the womb and makes it difficult for an egg to settle there.  
 Needs to be taken at the same time every day. [2]
- (iv) ONE mark for each correct answer TWO required  
 Diaphragm or cap  
 Intra-uterine device / IUS / loop / coil  
 Female sterilisation [2]  
 Injections  
 Implants  
 Patches

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- (v) TWO marks for the correct answer  
The penis is withdrawn from the vagina before ejaculation, but some sperm may leak out before the main ejaculation takes place, [2]
- (vi) TWO marks for the correct answer  
When intercourse takes place without any contraception being used, or if contraception has failed, then pills can be taken. These are obtained from the doctor/chemist within 48 hours [2]
- (vii) ONE mark for each correct answer THREE required  
Intra-uterine-device [3]
- (viii) THREE marks for the correct answer  
A plastic and copper device is put into the uterus and prevents a fertilised egg from settling in the uterus. [3]
- (b) (i) ONE mark for each correct answer THREE required  
Too few sperm being produced  
Failure to ovulate  
Blocked Fallopian tubes  
Cervical mucus is too thick [3]
- (ii) TWO marks for each correct answer TWO required  
Fertility drugs: women who cannot ovulate are given hormones to produce eggs.  
IVF: fertilisation takes place outside the body and the embryo is implanted into the uterus.  
Surrogacy: another woman carries the baby for the couple.  
Sperm/egg donation: other people donate their sperm or eggs. [4]  
Artificial insemination

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Section C  
Answer one question

Marks are awarded depending on the quality of the response.

14 A high level response 14-20

A good candidate will be able to describe the differences between fostering and adopting and explain why some people wish to adopt and how this takes place.

Issues may include:

**Fostering**

Children may return to their own home

Temporary arrangement

Foster parents are paid

Foster parents have no legal rights over the child

Children stay with foster parents for varying amounts of time

Children may become attached to foster parents and it can be difficult for them when they return to their own parents.

**Adoption**

A legal process where adults become legal parents of the child

Permanent arrangement

Adoptive parents are legally responsible for the child

Natural parents relinquish all parental responsibility

No payment- only those benefits entitled to any parent.

Reasons for adoption:

Unable to have children of their own

Grandparents or other relatives of a child whose parents have died

Mother marries a new husband and they jointly adopt her child

Foster parents who want to adopt a child they have fostered for three years or more.

How adoption takes place:

People who wish to adopt are interviewed by an adoption agency to see if they are suitable

To ensure that they really want to adopt a child

To make sure they are ;

Happy

Healthy

In a stable relationship

Can financially afford to adopt

When a suitable child becomes available the child lives with prospective parents for a trial period.

Social worker makes regular visits

Natural parent can change their mind

Child needs to be six weeks old before trial period starts

If trial period is satisfactory then adoption can go ahead.

A mid range response 7-13

Candidates will be able to give some differences between fostering and adopting and briefly mention why people adopt but not how the adoption takes place.

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A low level response 0-6

Candidates will provide a confused answer to the differences between fostering and adopting and may say that people wish to adopt because they cannot have their own children.

15. A high level response 14-20

A good candidate will be able to explain in detail when accidents are more likely to happen and will describe how to make a child's environment safer.

Issues will include;

Accidents are more likely to happen :

At times of stress-people become more careless and forgetful

When parents are less alert-senses may be dulled by medicines or alcohol

To children who are over protected-so aware of danger that it makes them nervous or they may rebel against their parents

To children who are under protected- unaware of dangers and fail to take care.

To children who are neglected and abused.

Tiredness/illness

How to make a child's environment safer:

#### **Home**

Dangerous objects to be kept out of the way e.g. sharp knives, matches, lighters, Peanuts, plastic bags.

Dangerous situations-children kept away from the kitchen by using safety barrier/gate.

Special locks fitted to cupboards.

Socket covers put into electric sockets.

Fireguards to prevent burns

Pan handles at back of the cooker

Windows to be securely fastened

Keep chairs away from windows to prevent climbing

Coil / flex / cooker guards

#### **Garden**

Cover ponds or fence off

Fence the whole garden/child proof catches on any gates

Keep all tools locked away

Remove animal droppings

Keep barbecue equipment out of reach

Keep garden toys safe and in good repair

Any chemicals must be locked away

#### **Road and Travel**

Teach road safety as soon as possible

Never let children out on the road on their own

Walking reins should be used for small children

Not to talk to anyone in the street unless they know them.

In cars children should be fastened in the correct restraint

Child seat should be anchored in firmly

Booster seats are helpful to allow the seatbelt to fit correctly on an older child

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A mid-range response 7-13

The candidate will be able to provide one or two answers to explain why accidents happen but not in any detail. Some good descriptions on how to make the environment safer.

A low level response 0-6

The candidate may not know why accidents happen but will be able to suggest ways of making the environment safer although these will lack any detail.