

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.

CIE is publishing the mark schemes for the October/November 2002 question papers for most IGCSE, GCE Advanced Subsidiary (AS) and GCE Advanced (A) Level syllabuses.



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]

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]

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

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]

- 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 14th 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]

- (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

- (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

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.

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