

MARK SCHEME for the October/November 2012 series

0637 CHILD DEVELOPMENT

0637/01

Paper 1, maximum raw mark 100

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2012 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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Section A

- 1 (a) Fully formed at 12 weeks
- (b) Any **two** from:–
- To enable baby to feed
 - To enable baby to breathe
 - To excrete waste matter
 - Passes antibodies from the mother to give baby some resistance to infection
 - Acts as a barrier against harmful substances
 - Links blood supply of mother to baby
 - Hormones to maintain pregnancy
 - etc.
- [2]
- 2 (a) A boy is conceived when an X sex chromosome from the female egg is fertilised by a sperm containing a Y chromosome.
- [2]
- (b) A girl is conceived when an X sex chromosome from the female in an egg is fertilised by a male sperm containing an X chromosome.
- [2]
- 3 (a) 16 – 20°C
- [1]
- (b) Low body heat
- [1]
- (c) Any **four** from:–
- Makes the baby lively
 - Improves appetite
 - Makes cheeks a healthy colour
 - Helps them to sleep at night
 - Sun's ultraviolet rays kills bacteria
 - Sun helps body to produce Vitamin D
- [4]

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- 4 Any **four** from:–
- Adults provide plenty of opportunities to learn new skills and back up learning at a particular stage
 - Give support and encouragement without interrupting play
 - Help the child understanding what they see, hear etc.
 - Explain what is happening and let them help in planning activities
 - Help them remember what has happened and what may happen
 - Set a good example for the child
 - Talk to them
 - Model behaviour
 - Guide them
 - Set boundaries
 - etc.
- [4]

5 (a) When a baby dies suddenly, unexpectedly [1]

- (b) Any **three** from:–
- Lay babies on their backs
 - Keep babies away from tobacco smoke
 - Prevent babies becoming over hot
 - Breast-feed
 - If baby is unwell get medical advice
 - Place babies feet to foot of cot
 - No pillow until two years old
 - Do not share a bed with a young baby
 - Do not use second-hand mattress
 - etc.
- [3]

- 6 Any **four** from:–
- TENS
 - Herbal remedies
 - Aromatherapy
 - Acupuncture
 - Water birth
 - Breathing and massage
 - Homeopathy
 - etc.
- [4]

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7 (a)

- Lay baby along your forearm
- Give five sharp pats on babies back
- Keep babies head low and support the chin
- etc.

[3]

(b)

- Bend child over your knees
- Give five sharp slaps between child's shoulder blades
- Encourage child to cough
- etc.

[2]

[Total: 30]

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Section B

- 8 (a) Gross motor skills: –
- Use of large muscles e.g. arms, legs, hips and back
 - Used when sitting, walking, catching, climbing etc. [2]
- Fine motor skills: –
- Coordination of smaller muscles of hands and fingers
 - Used when pointing, drawing, fastening buttons, writing, using a knife and fork etc. [2]
- (b) One mark for each reflex, two marks for each description.
- Swallowing and sucking reflex
 - Rooting reflex
 - Grasp reflex
 - Walking reflex
 - Startle reflex
 - Falling / Moro reflex (4 x (1 + 2) [12])
- (c) Some reflexes are necessary for the survival of the baby – sucking, swallowing etc. [1]
- (d) At three months [1]
- (e) These reflexes are replaced by actions the baby has to learn etc. [1]
- (f) (i) When tooth appears [1]
- (ii) Plaque forms [1]
- (iii)
- Minerals / names
 - Vitamin / names
 - Reason why these are needed
 - Crunchy things to eat
 - etc. [4]

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9 (a) Six items must be appropriate, one mark each.
One mark for appropriate use of each

Possible items: –

- Antiseptic wipes
- Plasters
- Gauze dressing
- Bandages
- Adhesive tape
- Safety pins
- Scissors
- Crepe bandage
- Triangular bandage
- Tweezers
- Eye dropper or eye bath
- Sterile eye pads
- Calamine lotion
- Anti-sting cream
- Plastic gloves
- Disposable bag etc.

(6 x (1 + 1) [12]

(b) Reasons could include: –

- Severe bleeding – especially bleeding from head / ears.
- Severe burns covering an area of skin 4 cm square.
- Severe blow to the head when it leads to unconsciousness, fit or convulsion.
- Severe diarrhoea or vomiting especially in a baby.
- Broken bone.
- Electric shock.
- Swallowing poison, button, battery, safety pin etc.

[7]

(c) Three features and three appropriate reasons required e.g.

- Cooker guard
- Socket covers
- Cupboard locks
- Floor liner
- Curly / short cables
- Control catches
- Safety glass in door
- Rounded edges etc.

(3 x (1+ 1) [6]

[Total: 50]

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Section C

Answer **one** question.

Answer **(a) or (b)** of this question

- 13–20 marks – High response – each section answered fully
- 7–12 marks – Medium response – each part attempted or parts answered in detail
- 0–6 marks – Low level response – answers lack detail or brief responses

10 (a) (i) Each factor must be discussed.

Parents should have a stable relationship, so that they can talk and face worries together etc.

Career implications, one parent would need a career break or maternity leave.

Financial implications.

Parental age – this should not be the reason to start a family – both parents want a baby – this would prevent one parent resenting the other etc.

The needs of a baby, physical, social and environmental.

(ii) Points should be explained not just a list.

Children are hard work; they require 24 hour care every day, regardless of parent's tiredness etc.

May give life more purpose.

Parental responsibility lasts for many years, not just when they are babies. This can become more difficult as the child becomes an adolescent and parents age. Sacrifices of both money and time are required, even if this is in conflict with parent's requirements etc.

Parents cannot enjoy the freedom they enjoyed before the birth, but they do have a new pleasurable interest etc.

Parents can gain much pleasure and satisfaction if they are prepared to give time and energy to bringing up the child etc.

[20]

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(b) (i) Answer must not be a list, points should be discussed.

Points to be discussed should include: –

Breast feeding is safe – less likely to contain harmful bacteria than when bottle fed.

It is easy – always available and at the correct temperature.

It does not usually cause indigestion (depending on mother's diet).

Breast milk contains antibodies, which in first few months, when baby has low resistance to infection, help to reduce infection.

Baby is less likely to become overweight as breast milk is at correct consistency.

Also less likely to be constipated, get nappy rash and less likely to develop asthma and eczema.

Breast milk is cheaper, no need to buy bottles, sterilisers and milk.

The bond of attachment is strong because of closeness and time spent with baby etc.

(ii) An explanation is required, not a list.

Points to include are as follows: –

A mother must wash hands thoroughly before feeding, before and after sterilising and before making up feed, to prevent bacteria on hands getting into the food chain etc.

Bottles, teats and caps must be washed thoroughly in hot soapy water using a bottle brush. They then must be sterilised.

There are four ways to sterilise: –

- A chemical steriliser (explain how it kills bacteria)
- A steam steriliser (explain how it kills bacteria)
- A microwave steriliser (explain how it kills bacteria)
- By boiling (explain how it kills bacteria)

When using a chemical steriliser, it must be rinsed with boiling water to remove chemicals. Bottle should then be made up, teat put on and protect from bacteria in the air by placing a cap over it. Bottles should not be made up too far in advance to prevent any bacteria from multiplying etc. [20]

[Total: 100]