



General Certificate of Education

**Health and Social Care
8621/8623**

HC06

Mark Scheme

2007 examination - June series

HC06

Question 1

- (a)(i) Mite **1 mark**
- (a)(ii) Any 3 of: (tiny) grey or scaly swellings/on fingers – wrists – armpits – genitals/ reddish lumps AW/ on – limbs – trunk – buttocks/ itchy skin scabs or sores (caused by scratching)/wavy lines or burrows
Not parasite or method. Ignore inflammation/rashes **3 marks**
- (a)(iii) Any 2 of: avoiding (skin) contact with other people AW/keep bed linen separate or not sharing bed/wash clothes separately/use separate cutlery
Allow: not sharing clothes Allow: take appropriate medication AW (to kill mites)
Not: take antibiotics max 2 **2 marks**
- (b)(i) Ref to: immune system (1) loses efficiency AW in old age (1) **2 marks**
- (b)(ii) Any 3 of: young/pregnant/those who are ill/in hospital – recovering from illness/ lifestyle choices e.g. drug needle sharing/poor hygiene practices
alcohol/smoking/unprotected sex with many partners max 3 **3 marks**
- (c) Ref to: cells/tissues damaged (1) toxins being released (1) nutrients removed from host cells/tissues (1) body's efforts at defence/immune system response (1) **4 marks**

Question 2

- (a) Ref to: similar numbers females/males have 1 or 2 extracted teeth (1) similar numbers male and female have 3 or more fillings (1) or vice versa
in all other categories males more than females/any one example category (1 mark each) max 3 marks for gender comparisons
overall males have more extractions/females less extractions (1)
overall males have more fillings/females less fillings (1)
few with no fillings/only 14 females/only 4 males (1) Allow comparisons fillings v extractions/ Allow: most common 1/2 fillings
females tooth decay less/dental care better or vice versa for males (1) max 5 **5 marks**
- (b)(i) Ref to: a sticky substance formed on teeth (1) made from food remains/ sugar/carbohydrate (1)
mucus (1) saliva (by products) (1) and bacteria (1) max 3 **3 marks**
- (b)(ii) 1) toothache – by infection (1) demineralisation AW (1) causing blood vessels to enlarge (1) in dentine/pulp cavity (1) pressing against nerves of the tooth (1) **4 marks**
2) abscesses – when pus collects (1) at tooth's root gum (1) causing swelling/ redness/soreness/inflammation (1) due to micro organism/bacterial infection (1) max 3 **3 marks**

Question 3

- (a) Glue ear – otitis media (1) is an accumulation of fluid substance (NOT WAX) (1) produced by mucus – secreting lining (1) in the middle ear cavity (1) which blocks the Eustachian tube (1) preventing drainage of the fluid (1) so impairing/putting 'pressure' on (1) normal ossicle AW movements (1) Ignore treatments i.e. grommets
max 6 **6 marks**
- (b) Ref to progressive deafness in elderly/presbycusis (1) which is a sensorineural problem (1) caused by degeneration of hair cells (1) in cochlea (1) nerve fibres (1) in the inner ear (1) so sounds less audible/difficult to distinguish from background noise/ high pitched sounds (1) max 6 **6 marks**
- (c)(i) Tinnitus (1) ringing/whistling/hissing/buzzing sound (1) in absence of noise/ nerve signals sent to brain without stimulus AW(1) **3 marks**

Question 4

- (a) Ref to: more girls than boys suffer regular headaches (1)
Roughly similar numbers of migraines in boys and girls (1)
Roughly similar numbers macular rashes boys and girls (1)
Girls have more 'other rashes' than boys (1)
Migraines least common in boys/girls/both (1)
Other rashes most common in boys/girls/both (1)
Allow other comparisons between conditions and genders max 5 **5 marks**
- (b) Ref to: not raised spots/spots at skin level (1) different colour /texture to 'normal' skin (1) Not: localised/generalised **2 marks**
- (c)(i) Ref to: severe headache AW (1) preceded/accompanied by visual/ stomach disturbances (1) often one sided/part of head (1) **2 marks**
- (c)(ii) Any 2 of: stress/dehydration/hangover/prolonged travel/foods e.g. chocolate – cheese/stuffy atmosphere/hunger max 2 **2 marks**
- (d)(i) 1) salmonella bacterium/Norwalk virus/E. Coli/ C. difficile/ Campylobacter **1 mark**
2) Toadstools/fruit juice/orange in zinc container **1 mark**
- (d)(ii) Any 2 of: stomach pain AW/vomiting AW/ diarrhoea /fever max 2 **2 marks**

Paper total 60 marks