



General Certificate of Education

Health and Social Care

8626/8629

HC14

Mark Scheme

2009 examination – January series

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- 1ai) Ref to GP will: use hands/fingers/feel part(s) of Margaret's body (1) determining size/shape/location/texture – firmness of tissues/objects/swellings/lumps/joint movement/tenderness AW/abnormality max 3
1 mark each (2) typical of certain diseases/disorders AW (1) so can refer for further tests (1) 5 marks
- a ii) Any 3 of: taking body temperature/blood pressure/visual examination/percussion/testing reflexes/using a stethoscope max 3 3 marks
- b) Ref to the GP: searching data banks of symptoms/large amounts of information (1) contact other professionals/bodies (1) provides possible diagnoses for symptoms (1). Allow ref clinical decision support systems (CDSS)/Prodigy/Isabel (1) 2 marks
- ci) Ref to Positron Emission Tomography (1) PET scanning using radioactive versions (1) of 'normal' substances (1) injected into the bloodstream (1) metabolism of the substances (1) recorded by sensors/camera (1) and cross sectional images AW (1) built up by computer(1) ref "hot spots" AW (1) max 5 5 marks
- cii) Ref to tissue removed by scalpel/minor surgery (1) local anaesthetic/sterilised area (1) preservative/stabiliser added (1) may be frozen (1) set in wax (1) sliced (1) mounted on glass slide (1) stained (1) examined for abnormalities using microscope (1) max 5 5 marks
- 2ai) Ref to: men having treatment for hypertension increases with age (1) more men not having treatment for hypertension than those having treatment at all ages (1) allow: generally as age increases so does the number of men with hypertension not having treatment (1) non treatment – males in 45-54 year category 'unusual' AW/relatively fewer than might expect AW (1) numbers fall in 75+ males – possibly due to deaths (1) females having treatment for hypertension increase with age (1) females with hypertension not having treatment generally increases with age (1) numbers fall in 75+ females – possibly due to deaths (1) (generally) more males with hypertension than females (1) with increasing age numbers closer together AW (1) allow comparator examples – males 25-34 year olds are 6x more likely to have hypertension than 25-34 year old females (1) Most/least max 2. Comparisons max 4. For similarities/numerical/relationships more/less. No marks for simply quoting data. Allow reasoned arguments re unknown sample size/treatment need or not/treatment effectiveness/refusal to be treated/naturally rising b.p. with age (1) each. max 9 9 marks
- 2aii) Ref to: sphygmomanometer/digital(wrist-upper arm)device (1) uses inflating /tightening cuff (1) around wrist/upper arm (1) constricts blood flow (1) records pressure – systolic – heart beat recorded pressure (1) when blood flow stopped (1) when pressure released (1) diastolic – pressure between beats AW (1) in mm Hg (1) Allow use of stethoscope (with sphygmomanometer) to hear blood flow (1) max 6 6 marks
- b) Ref to: treatment affecting quality of life (1) or even life expectancy (1) need to know benefits/risks – consider balance (1) have right to refuse treatment/cultural differences AW (1) individual may cooperate with treatment if allowed choice (1) empowers client/gives client control AW (1) max 5 5 marks
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| 3ai) | Self treatments – bed rest (1) drinking plenty of fluids (1) taking non-prescription AW drugs (1) First aid techniques (1) keep warm (1) | 3 marks |
| aii) | Self treatment can – relieve symptoms of illness (1) make individual more comfortable (1) able to live/act ‘normally’ while still ill (1) max 2 | 2 marks |
| b) | Ref to hospital nursing – professional service (1) able to monitor patients closely (1) different specialist skills (1) quick response AW to changes (1) access to specialist equipment/treatments (1) max 4 | 4 marks |
| ci) | Ref to a diagnostic tool AW (1) where x-rays are generated by an x-ray machine (1) sent as invisible beam (1) ionising radiation AW (1) penetrates soft/less dense tissue (1) unable to pass through harder/more dense tissue/bone (1) causes ‘shadows’ AW on photographic paper/film (1) soft tissue dark/bone lighter (1) gives image examined in front of illuminated panel (1) shows damage/problems with bones (1) max 7 | 7 marks |
| cii) | Advantages of x-ray imaging include – fast/easy to use/inexpensive/painless max 2 Disadvantages of x-ray imaging include – soft/less dense tissue not imaged AW/images not high definition/radiation is a health risk max 2 | 4 marks |
| 4ai) | Minor surgery – outpatient/day surgery (1) small scale/non life threatening) physical intervention (1) by incision (1) inspection/removal diseased tissue (1) and/or replacement/ redirection/repair of body channels (1) implanting electronic/mechanical devices/or other implants e.g. contraception. (1) max 3 | 3 marks |
| aii) | Local anaesthetic drug - chemical causing numbness/preventing pain (1) in one area/limited part of the body (1) by interrupting nerve impulses (1) | 3 marks |
| bi) | Aseptic techniques – ref to germ AW free technique (1) created by sterilization (1) of equipment/surfaces/people (1) max 2 | 2 marks |
| bii) | to prevent germ AW entry into Ben’s body (1) so reducing risk of subsequent infection (1) speed recovery (1) max 2 | 2 marks |
| c) | Ref to: general anaesthesia puts person to sleep/local doesn’t AW(1) local numbs a small area/general paralyses whole body AW (1) | 2 marks |
| d) | Lifestyle choices may include: smoking/drinking alcohol/not exercising/overeating/taking illegal drugs max 2 Generally relevant points may include – ‘wasted’ resources/others may gain more benefit/limited available resources/individual rights to treatment/ ref to individual may be ‘addicted’/which in itself needs treatment/other factors may be important e.g. age – other medical conditions. Candidates may outline specific issues related to the named life style choices e.g. lung/heart disease with smoking/liver disease/nerve damage with alcohol abuse. | 2 marks |

Band 1 - 1-3 marks

Generally simplistic accounts, tending to be one sided stating a view rather than a discussion. If only one sided argument then restrict to 1 mark

Band 2 - 4-6 marks

Some valid points made both 'for' and 'against' treatment but lacking in some detail and/or coherence. Points reasoned rather than just stated. For six marks must have at least 4 relevant points.

Band 3 - 7-8 marks

Reasoned points made in detail covering most of potential range. For 8 marks must make 6 or more relevant points coherently.

6 marks