Mark Scheme - GCSE Computing – Database Answers

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| **Qn** | **Answer** | **M** |
| 1 a | A set of data ...  ... organised ...  ... as a set of records...  ... in one or more files. | 2 |
| 1 b | Primary key: ChannelID  It is a unique identifier/Two channels can have the same ChannelName but they cannot have the same  ChannelID  1 for primary key + any other 2 bullet points | 2 |
| 1 c (i) | ChannelID/The primary key of the CHANNEL table  ... is stored in the PROGRAMME table  ... where it is a foreign key | 2 |
| 1 c (ii) | Less data entry required  ...because programme and channel details are stored once  Avoids redundancy/don’t have to repeat channel details for every programme on that channel  Avoids inconsistency (when channel data changes) | 3 |
| 2 a | |  |  |  |  |  | | --- | --- | --- | --- | --- | |  | | | | | |  | | Form | Query | Report | |  | This can be used to print out all the appointments that the dentist has  booked. |  |  |  | | This can be used to enter a patient’s details when the patient registers with the dentist. |  |  |  | | This can be used to find out all the appointments that a certain patient has made. |  |  |  |   1 mark per row | 3 |
| 2 b | Two from:  The time is in the correct format / hh:mm  The time is within the dentist’s working day  The hours are in the range 1 – 12 / 0 – 24  The minutes are in the range 0 – 59  Accept other correct validation checks. | 2 |
| **Qn** | **Answer** | **M** |
| 2 c | E.g.  The patient’s data does not have to be repeated for each appointment…  … as the patient ID can be stored with the appointment to link the two entities  Allows the patient (and appointment data) to be manipulated independently e.g. if the name of the patient changes.  Avoids the possibility of the patient data becoming inconsistent due to being stored multiple times  (1 mark for each bullet. Max 3 marks) | 3 |
| 3 a | * Create tables / entities * Define fields / attributes / columns * Define (primary) keys * Define relationships / links between tables / foreign keys * Set the constraints on the data /validation rules / data types / field lengths / other suitable example.   Accept define secondary keys / indexed fields. | 3 |
| 3 b | e.g.   * Add client/appointment data * Edit client/appointment data * Delete client/appointment data * Run/Create/View reports using a relevant example of a report that would be needed e.g. today’s appointments * Search/query for data using a relevant e.g. search for a client’s phone number * Back up (client/appointment) data. * Archive (client/appointment) data/ example of archiving   Accept any two *different* operations that would be typical of the use of a database system by the hairdresser in managing client and appointment data. | 2 |