



12 Pages

1. Please give the information requested in the boxes below.
2. Enter your name in the space provided to the right and seal down (using the label provided) to hide your name.
3. The answers must be legibly written. The Examiner will be charged to the candidate.
4. Write your answers in ink.
5. Begin each answer on a fresh page. Do all rough work in the answer book and cross it through.
6. No part of this book is to be torn out; it must be handed in complete.
7. If more books than one are used, fasten them together using the tags available from the invigilator(s).
8. **Every book must be handed in. In no circumstances may answer books, used or unused, be taken out of the examination venue.**

1	Student Number	1701633
2	Title of Examination Paper	Database management system
3	Module Code	ACCA5014
4	Date and Time of Examination	09/05/19 9:02-11:02
5	Examination Venue	310
6	Seat Number	G025
7	Number of Answer Books handed in	1

List the numbers of the questions you have attempted	Office Use
Q1	13.75
Q2	1.5
Q3	5.5
Total	20.75

(Gweler yr ochr arall am y fersiwn Cymraeg)

~~CHAR SubjectID~~

QT

a i) ~~CHAR SubjectID, NOT NULL~~
~~INT TutorNo,~~

Q1

a i) CREATE TABLE TutorBooking (

CHAR(6) BookingRes, NOT NULL
DATE BookingDate, NOT NULL
~~CHK BookingDate CHECK~~
~~Boo~~

CHAR(6) TutorNo NOT NULL
CHAR(6) StudentNo NOT NULL
CHAR(6) SubjectID NOT NULL
INT(6) SubjectLevel NOT NULL
INT(6) HourlyRate NOT NULL
);

no check
column name by type

5.75

a ii) CHAR(6) BookingRes NOT NULL ^{wrong syntax}
~~CHK~~ PK BookingRes CONSTRAINT

0.5

a iii) CHAR(6) TutorNo NOT NULL ^{1/2}
FK Tutor - TutorNo

CHAR(6) StudentNo NOT NULL ^{1/2}
FK Student - StudentNo

0.5

wrong syntax

Q iv) CREATE TABLE TutorSubject (

CHAR(6) TutorNo NOT NULL
 CHK_TutorNo CHECK ('[0-9][0-9][0-9][0-9][0-9][0-9]'),

no FK, no PK

CHAR(6) SubjectID NOT NULL
 CHK_SubjectID CHECK ('[0-9][0-9][0-9][0-9][0-9][0-9]'),

CHAR(5) KSLevel NOT NULL,
 CHAR(5) ALevel NOT NULL,
 CHAR(5) HLevel NOT NULL,
 INT MinHourlyRate NOT NULL,
 CHK_MinHourlyRate CHECK (MinHourlyRate < MaxHourlyRate)

INT MaxHourlyRate NOT NULL
 CHK_MaxHourlyRate CHECK (MaxHourlyRate > MinHourlyRate),
);

Q1 - 13⁷⁵

13³⁴

B i) SELECT FROM * Tutor WHERE DBSEpiry
 Date LIKE ('June, 2019')

not quote.
 messy ORDER, specify columns

①

Q2)
 TABLE TutorBooking (BookingRef, BookingDate,
 TutorNo, StudentNo, SubjectID, Subject
 Level, HourlyRate)

INSERT VALUES ('500', '30-May-2019', '66',
 '25', '100', NULL, NULL)

Syntax slightly wrong
 missing 2 other inserts

1.5

Q2 - 1.5



Q3

a) There are many different database security threats, one of them being an SQL Injection. SQL Injection is used to find weak security flaws in database fields that are easily guessable, example, would be an ID of 1 and having the field increment by 1 each time. SQL Injection is used to find out sensitive information in a database such as emails, passwords which would be a big threat to a company. ** not quite* (1)

b) DBA may use authentication as a security control to make sure each user can provide proof it's actually them. This could be in the form of biometrics, hand scanner, face recognition. DBA could also stricken more of the users privileges and where users have access to, to stop them accessing sensitive information. (3.5)

c) `SELECT FROM* Tutor WHERE Status LIKE ('Active')`
`SELECT FROM* Tutor ('FirstName', 'Surname', 'Email', 'City')`
`SELECT FROM* TutorSubject ('SubjectID',)`

not quite

(1)

Q3-55

5 1/2