



ZIMBABWE

**MINISTRY OF HIGHER AND TERTIARY EDUCATION,
INNOVATION, SCIENCE AND TECHNOLOGY
DEVELOPMENT**

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

NATIONAL CERTIFICATE

IN

INFORMATION TECHNOLOGY

MODULE: Database Concepts (Practical)

PAPER NO: 317/22/M03B

DURATION: 3 Hours

NOVEMBER/ DECEMBER 2025 EXAMINATION

REQUIREMENTS

1. A computer with DBMS software
2. Storage medium for each candidate
3. Printing facility
4. Serialised script cover

INSTRUCTIONS TO CANDIDATE

1. Answer all questions.
2. Submit both soft and hard copy.
3. Print both code and result set.

This paper consists of 4 printed pages.

QUESTION 1

Southern African Travel and Tours is an agent that assists tourists in getting hotel accommodation when they travel around Africa. Their database has the following relations:

Hotel (Hotelcode, HotelName, Address, City, Country)

Accommodation (Roomtype, RoomPrice, RoomDescription)

Room (Room No, Roomtype, Hotelcode, Occupancy)

Employee (Employee-ID, Hotelcode, Role ID, Name)

a) Using SQL commands perform the following:

- i) Create a database called AfricanToursdb (3 marks)
- ii) Create the given relations taking the following into consideration:
 - RoomPrice is of datatype decimal
 - Occupancy is of data type Boolean
 - All other attributes are of data type character
 - All attributes must contain a value.

(20 marks)

- iii) Add another column called Number_of_Rooms of data type integer before column named 'City' in the table 'Hotel'. (3 marks)
- iv) Change the name of the table named 'Accommodation' to Room_Type. (3 marks)
- v) Remove the table named Employee from the database. (3 marks)
- vi) Remove the column named 'Address' from the table 'Hotel'. (3 marks)

QUESTION 2

a) Use the tables created above to insert the following data.

Hotel

HotelCode	HotelName	Number_ of _Rooms	City	Country
H101	Kay Mawa	120	Likoma	Malawi
H102	Ellerman House	135	Cape Town	South Africa
H103	LaMamounia	140	Medina	Morocco
H104	Zun Zanzibar	170	Kendwa	Tanzania
H105	Elephant Hills	100	Victoria Falls	Zimbabwe
H106	Meikles	150	Harare	Zimbabwe

(5 marks)

Room_Type

Roomtype	RoomPrice	RoomDescription
Single Room	130.00	Designed for one person
Double Room	260.00	Accommodates two people
Triple Room	400.00	Suitable for three occupants
Quad Room	650.00	Good for four people
Standard Room	190.00	Entry level Rooms

(5 marks)

Room

Room No	Roomtype	HotelCode	Occupancy
H101A32	Double Room	H101	1
H101A33	Tripple Room	H101	0
H102449	Double Room	H102	0
H104Z11	Quad Room	H104	0
H105ZW99	Standard Room	H105	1

(5 marks)

- b) i) Change the RoomPrice of the Quad rooms to \$900.00. (3 marks)
- ii) Show the details of the hotels in Zimbabwe which are advertised by African Southern Tours. (5 marks)
- iii) A tourist is interested in hotels that start with the letter 'E' and has requested for a list of these hotels. Produce the list for the tourist. (5 marks)
- iv) In the table Room, Occupancy indicates whether a room has been taken or not. Show the details of Rooms that are still to be booked. (5 marks)
- v) A tourist is interested in knowing the prices of the different rooms offered by the various hotels. Produce a list that shows the details of room types, Prices and a general description. (5 marks)
- vi) A 10% discount is offered if a tourist pays using cash. Show the roomprice, roomtype and discounted Price of the rooms. (7 marks)

QUESTION 3

- a) Create the following users of the database.

Username	Password
Admin	ad2007H
Agent	age13a!
Guest	

(5 marks)

- b) Allow the admin to alter, read, update and delete tables in the database. (5 marks)
- c) Allow Guest to read all tables in the database. (5 marks)
- d) Change the password for guest to 'guest101' (5 marks)

.../tez