



<b>MODULE NAME:</b>	<b>MODULE CODE:</b>
<b>ADVANCED DATABASES</b>	<b>ADDB7311</b>

<b>ASSESSMENT TYPE:</b>	<b>TEST (PAPER ONLY)</b>
<b>TOTAL MARK ALLOCATION:</b>	<b>60 MARKS</b>
<b>TOTAL HOURS:</b>	<b>1.5 HOURS (+10 minutes reading time)</b>

**INSTRUCTIONS:**

1. Please adhere to all instructions in the assessment booklet.
2. Independent work is required.
3. Five minutes per hour of the assessment to a maximum of 15 minutes is dedicated to reading time before the start of the assessment. You may make notes on your question paper, but not in your answer sheet. Calculators may not be used during reading time.
4. You may not leave the assessment venue during reading time, or during the first hour or during the last 15 minutes of the assessment.
5. Ensure that your name is on all pieces of paper or books that you will be submitting. Submit all the pages of this assessment's question paper as well as your answer script.
6. Answer all the questions on the answer sheets or in answer booklets provided. The phrase 'END OF PAPER' will appear after the final set question of this assessment.
7. Remember to work at a steady pace so that you are able to complete the assessment within the allocated time. Use the mark allocation as a guideline as to how much time to spend on each section.

**Additional instructions:**

1. This is an OPEN BOOK assessment.
2. Calculators are allowed.
3. For open book assessments the students may have open access to all resources inclusive of notes, books (hardcopy and e-books) and the internet. These resources may be accessed as hard copies or as electronic files on electronic devices. All electronic devices batteries must be fully charged before the assessment as no charging of devices will be permitted during the sitting of the assessment. The IIE and associated brands accept no liability for the loss or damage incurred to electronic devices used during open book assessments.
4. Answer All Questions.
5. Instructions for assessments including practical computer work:
  - Use of good programming practice and comments in code is compulsory.
  - Save your application in the location indicated by the administrator (e.g. the Z:\ drive or your local drive).
  - Create a folder as follows: use the module code and your own student number and create a folder with a folder name as per the format shown here:
  - **StudentNumber\_ModuleCode\_Test**. Save all files (including any source code files, template files, design files, image files, text files, database files, etc.) within this folder.

- *E.g. if your student number is 12345, and you are writing an test for the module ADDB7311, create a folder named **12345\_ADDB7311\_Test** and use this throughout the session to save all of your files.*
6. **Important:** *Upon completion of your assessment, you must save and close all your open files and double click the ExamLog application on your desktop. You must follow the instructions carefully to ensure that the information about the files that you have submitted for this assessment has been logged on the network. Specify the location of your source code on your question paper.*

The following set of relations has been set up for a local events company. At present, the database is small and only includes information about artists, events and bookings. The relationships between the tables must be derived from the data within each of the tables. The tables and the information required are as follows:

EVENT(EVENT\_ID, EVENT\_NAME, EVENT\_RATE)

ARTIST(ARTIST\_ID, ARTIST\_NAME, ARTIST\_EMAIL)

BOOKINGS(BOOKING\_ID, BOOKING\_DATE, EVENT\_ID, ARTIST\_ID)

Sample Data is shown below:

#### EVENT

EVENT_ID	EVENT_NAME	EVENT_RATE
1001	Open Air Comedy Festival	R 300
1002	Mountain Side Music Festival	R 280
1003	Beach Music Festival	R 195

#### ARTIST

ARTIST_ID	ARTIST_NAME	ARTIST_EMAIL
A_101	Max Trillion	maxt@isat.com
A_102	Music Mayhem	mayhem@ymail.com
A_103	LOL Man	lol@isat.com

#### BOOKINGS

BOOKING_ID	BOOKING_DATE	EVENT_ID	ARTIST_ID
1	15 July 2017	1002	A_101
2	15 July 2017	1002	A_102
3	27 August 2017	1001	A_103
4	30 August 2017	1003	A_101
5	30 August 2017	1003	A_102

**Question 1****(Marks: 10)**

You will need to create the tables on page 3 to complete the test. Please create the tables and populate them using SQL Developer or SQL\*Plus.

**Question 2****(Marks: 8)**

Create an SQL query that will display the artist who has the least amount of performances.

**Sample Results**

ARTIST_NAME	PERFORMANCE_COUNT
LOL Man	1

**Mark Allocation**

Requirement	Mark	Examiner
Correct select statement used.	3	
Correct Tables used	3	
Correct output	2	
TOTAL	8	

**Question 3****(Marks: 6)**

Create an SQL query to display the artist name and the amount of revenue generated from the performances.

**Sample Results**

ARTIST_NAME	REVENUE
Music Mayhem	R 475
Max Trillion	R 475
LOL Man	R 300

**Mark Allocation**

Requirement	Mark	Examiner
Correct select statement used	2	
Correct tables used	2	
Correct output	2	
TOTAL	6	

**Question 4****(Marks: 8)**

Create a PL/SQL query to display the artist name and the booking date for Event ID 1001.

**Sample Results**

ARTIST NAME: LOL Man  
BOOKING DATE: 27/AUG/17

**Mark Allocation**

Requirement	Mark	Examiner
Variables declared correctly	2	
Correct select statement used	2	
Correct tables used	2	
Correct output	2	
TOTAL	8	

**Question 5****(Marks: 10)**

Management of the events have decided to allow a 10% discount on all events that cost over R 250. Create a PL/SQL query to display the event name and price, with or without the applied discount.

**Sample Results**

Open Air Comedy Festival price: R 270

-----

Mountain Side Music Festival price: R 252

-----

Beach Music Festival price: R 195

-----

**Mark Allocation**

Requirement	Mark	Examiner
Variables declared correctly	2	
Correct select statement used	2	
Correct tables used	2	
Correct decision statement used	2	
Correct output	2	
TOTAL	10	

**Question 6****(Marks: 8)**

Create a view called Event\_Schedules that will display the event names which will be held between 1 July 2017 and 28 August 2017.

**Sample Results**

EVENT_NAME	EVENT RATE	BOOKING_DATE
Mountain Side Music Festival	R 280	15/JUL/17
Open Air Comedy Festival	R 300	27/AUG/17

**Mark Allocation**

Requirement	Mark	Examiner
View created correctly	2	
Correct select statement used	2	
Correct tables used	2	
Correct output	2	
TOTAL	8	



**Question 7****(Marks: 10)**

Create a PL/SQL query to display the events that have an event price greater than the average price of all the events.

***Sample Results***

Open Air Comedy Festival

Price: R 300

-----

Mountain Side Music Festival

Price: R 280

-----

***Mark Allocation***

Requirement	Mark	Examiner
Variables declared correctly.	2	
Correct select statement used.	3	
Correct tables used	2	
Correct output	3	
TOTAL	10	

**END OF PAPER**