

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	(A) Perform the Extraction Transformation and Loading (ETL) process to construct the database in the Sqlserver / Power BI. (B) Create the ETL map for the above and setup the schedule for execution	<b>30</b>
2.	Show Implementation of Classification algorithm in R Programming.	<b>10</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	(A) Create the cube with suitable dimension and fact tables based on ROLAP, MOLAP and HOLAP model. (B) Import the above cube in Microsoft Excel and create the Pivot table and Pivot Chart to perform data analysis.	<b>30</b>
2.	Perform the data clustering using clustering algorithm in R Programming.	<b>10</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	(A) Create 3 Databases 1) CustomerOLTP 2) CustomerStaging 3) CustomerDW 1) Create a CustOLTP table in CustomerOLTP(custid,custname,address,sal) and insert atleast 20 records. 2) Create a Custstaging table in CustomerStaging and copy the data of CustOLTP table from CustomerOLTP database into Custstaging table. 3) Create a CustDW table in CustomerDW(cid,cname,add,salINR,salDollar). Apply ETL process on the Custstaging table by applying following transformations (i) custid and custname should be in capital case. (ii) Derive a new column salDollar by the expression (salINR/70)	<b>30</b>
2.	Create the ETL map for the above and setup the schedule for execution	<b>10</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	(A) Create the cube with suitable dimension and fact tables based on ROLAP, MOLAP and HOLAP model. (B) Import the above cube in Microsoft Excel and create the Pivot table and Pivot Chart to perform data analysis.	<b>30</b>
2.	Perform the Linear regression on the given data warehouse data.	<b>10</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	(A) Perform the Extraction Transformation and Loading (ETL) process to construct the database in the Sqlserver. (B) Import the datawarehouse data in Microsoft Excel and create the Pivot table and Pivot Chart.	<b>30</b>
2.	Show prediction Using Linear Regression.	<b>10</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	(A) Create the cube with suitable dimension and fact tables based on ROLAP, MOLAP and HOLAP model. (B) Execute the MDX queries.	<b>30</b>
2.	Perform the linear regression on the given data warehouse data.	<b>10</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	(A)Perform the Extraction Transformation and Loading (ETL) process to construct the database in the Sqlserver. (B) Apply the what – if Analysis for data visualization. Design and generate necessary reports based on the data warehouse data.	<b>30</b>
2.	Perform the data clustering using clustering algorithm in R Programming.	<b>10</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	(A)Create the cube with suitable dimension and fact tables based on ROLAP, MOLAP and HOLAP model. (B)Import the above cube in Microsoft Excel and create the Pivot table and Pivot Chart to perform data analysis.	<b>30</b>
2.	Execute the MDX queries.	<b>10</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	<p>A) Create 3 Databases 1) CustomerOLTP 2) CustomerStaging 3) CustomerDW</p> <p>1) Create a CustOLTP table in CustomerOLTP(custid,custname,address,sal) and insert atleast 20 records.</p> <p>2) Create a Custstaging table in CustomerStaging and copy the data of CustOLTP table from CustomerOLTP database into Custstaging table.</p> <p>3) Create a CustDW table in CustomerDW(cid,cname,add,salINR,salDollar).  Apply ETL process on the Custstaging table by applying following transformations</p> <p>(i) custid and custname should be in capital case.  (ii) Derive a new column salDollar by the expression (salINR/70).</p>	<b>30</b>
2.	Perform the data clustering using clustering algorithm.	<b>10</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	<p>(A) Create the Data staging area for the selected database.</p> <p>(B) Import the legacy data from different sources such as ( Excel ) and load in the target system(SQL server)</p>	<b>20</b>
2.	<p>(A) Implement k-means clustering using R Tool</p> <p>(B) Show prediction Using Linear Regression</p>	<b>20</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	(A)Perform the Extraction Transformation and Loading (ETL) process to construct the database in the SQL Server.	<b>20</b>
2.	(A)Implement k-means clustering using R Tool (B)Show prediction Using Linear Regression	<b>20</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>

**UNIVERSITY OF MUMBAI**  
**T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)**  
**(Practical Examination)**  
**BUSINESS INTELLIGENCE (USIT6P3)**

**Seat No:** \_\_\_\_\_

**Max. Marks: 50**

1.	(A) Create the Data staging area for the selected database. (B) Perform the Extraction Transformation and Loading (ETL) process to construct the database in the SQL Server.	<b>30</b>
2.	Perform the data clustering using clustering algorithm in R Programming.	<b>10</b>
3.	Viva	<b>5</b>
4.	Journal	<b>5</b>