# Royal College of Arts, Science and Commerce

## **T.Y.B.Sc Computer Science**

#### **Semester VI 2019-2020**

## **Data Science (Course code: - USCS606)**

## **Sample Questions**

Data that summarize all observations in a category are called as		
a) frequency data	b) summarized data	
c) raw data	d) analyzed data	
Data Science is a field that	·	[1M
a) Extracts meaningful predictions.	information, make decisions and	
b) Extracts raw informat	ion	
c) Separates structured a		
d) Contains semi structur	red data	
Data is difficult to manipulate and typically		
needs to be processed in some way before it can be used in		
standard data analysis software.		
a) Structured data	b) Unstructured data	
c) Summarized data	d) Frequency data	
Missing values are coded by	symbol and	[1M
function is used to identify miss	sing values in data set.	
a) AN, Any()	b) NA, is.na()	
c) NA, missing()	d) AN, isempty()	
plot shows comparison between discrete		[1 <b>N</b>
categories.		
a) Scatter	b) Bar	
c) Histogram	d) Line	
is the process of creating visual representation of		
data to bring some meaningful insights.		
a) Data Curation	b) Data Visualization	
c) Data Cleaning	d) Data Transformation	

is the process of transforming data from one			[1 <b>M</b> ]	
	format to another.			. ,
	a) Data Mining		Data wrangling	
	c) Data visualization	d)	Data transformation	
	is an unsupervised learning method.			[1M]
	a) Linear regression	b)	Cluster Analysis	
	c) Logistic regression	d)	SVM	
For k number of parameters, N number of observations, and a likelihood L, the equation to estimate BIC is			[1M]	
	a) $-2*ln(L) + ln(N)*k$	b)	-2*ln(L) + ln(k)*N	
	c) $-2*ln(L) - ln(N)*k$	d)	2*ln(L) - ln(k)*N	
	Quantitative data is also called as _		_ data.	[1M]
	a) Ordinal	b)	Numerical	
	c) Categorical		Nominal	
	are techniques used to reduce error by avoiding		[1M]	
	overfitting.			
	a) Smoothing		Aggregation	
	c) Cross validation	ĺ	Regularization	
The component of TSA that indicates seasonality patterns that are not repeating at regular frequency is			[1M]	
	a) Trend	b)	Seasonality	
	c) Noise	d)	Cycle	
	L1 and L2 regression are techniques.		[1M]	
	a) Validation	b)	Regularization	
	c) Approximation	d)	Ensemble	
	MongoDB is			[1M]
	a) Relational database	b)	Document database	
	c) Cloud database	d)	SQL database	
function is used in R for logistic regression.			[1M]	
	a) rpart()	b)	glm()	
	c) lm()	d)	ts()	

Q16)	Amazon Web Services falls into _	cloud-computing	[1M]	
	category.			
	a) Platform as a Service	b) Software as a Service		
	c) Infrastructure as a Service	d) Back-end as a Service		
Q17)	The penalty term in Ridge regression is			
	<ul> <li>a) Absolute value of magnitude of coefficients</li> </ul>	b) Square of magnitude of coefficients		
	c) Product of magnitude of coefficients	<ul> <li>d) Sum of product of magnitude of coefficients</li> </ul>		
Q18)	What is the correct order of life cy	cle of Data science process?	[1M]	
	<ul> <li>a) Frame the problem,</li> <li>collects raw data, clean</li> <li>data, EDA, generate</li> <li>reports</li> <li>c) Collects raw data, frame</li> <li>the problem, clean data,</li> <li>generate reports, data</li> <li>analysis</li> </ul>	<ul> <li>b) Frame the problem, collects raw data, EDA, clean data, communicates the results</li> <li>d) Collects raw data, clean data, frame the problem, generate reports, data analysis</li> </ul>		
Q19)	Multivariate data involves	·	[1M]	
	<ul><li>a) One variable</li><li>c) Zero variable</li></ul>	<ul><li>b) Two variables</li><li>d) Three or more variables</li></ul>		
Q20)	The best fitting model will have a	AIC and a BIC.	[1M]	
	a) Low, low	b) High, high		
	c) Low, high	d) High, low		