Total N	lo.	of Questions : 8]	SEAT No. :
PB37	7 9	o7	[Total No. of Pages : 2
		[6262]-56	· ·
			. 4 . (7 . •)
		T.E. (Artificial Intelligence and D	ata Science)
		DATASCIENCE	
		(2019 Pattern) (Semester - II)	(317529)
Time : 2	21/2	Hours]	[Max. Marks : 70
		ons to the candidates:	[
1)		Solve questions Q1 or Q.2, Q.3 or Q.4, Q.5 or Q.6	, Q.7 or Q.8.
2)		Neat diagrams must be drawn wherever necessary.	200
3)		Figures to the right indicate full marks.	
4)		Assume suitable data if necessary.	
01) -)	`	WPS in Data Application I if a Country	
Q1) a)		What is Data Analytics Life Cycle? Draw the diagram of the data analytics life.	[6]
b))	Draw the diagram of the data analytics life	
a`)	explain the Model Planning phase.	[6]
c))	Write a note on the Data Preparation phase	with its steps. [6]
Q2) a))	Explain in detail how the model-building pl	pace is built by a team in the
Q 2) a)	,	data analytics life cycle.	[6]
b)	List and explain the steps in the Data Preparati	
0,	,	lifecycle.	[6]
c))	Explain challenges in the Model building pha	
Q3) a)		What do you mean by Linear Regression? E	
b)	_	Explain the Apriori algorithm with an examp	
c))	Write a short note on the following:	0
		i) FP growth	
		ii) Decision Tree Classification	
.		OR	3,00
Q4) a)		Explain Data transformation using function	Y 11 0
b))	Write a short note on the following:	[6]
		i) Removing duplicates from the data set	· · ·
		ii) Handling missing data.	

c)

Handling missing data.

Explain association rules with examples

P.T.O.

[6]

Q5)	a)	What is clustering? Explain hierarchical clustering with an example.			
	b)	Explain the Holdout method and Random Sub Sampling method.			
	c)	Discuss parameter tuning and optimization.	[5]		
Q6)	a)	Short Note on: i) AUC-ROC Curves ii) Elbow plot	[6]		
	b)	What is clustering? Explain k - means algorithm.	[6]		
	c)	Write a short note on:	[5]		
		i) Time series Analysis			
	6	What is clustering? Explain k - means algorithm. Write a short note on: i) Time series Analysis TF-IDF.			
<i>Q7</i>)	a)	What is data Visualization? List and explain any one type of dat visualization.			
	b)	With a suitable example explain and draw a Box plot and explain it usage.			
	c)	Discuss various challenges to Big data Visualization.	[5]		
	OR				
Q8)	a)	Define data visualization. What are the different methods of dat visualization explain in detail.			
	b)	Explain in detail the Hadoop Ecosystem with a suitable diagram. [
	c)	With a suitable example explain the Scatter plot and explain its usage.[5]			
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F / A -	41.				
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