



**NAVRACHANA
UNIVERSITY**

a UGC recognized University

School: School of Engineering and Technology
Program/s: BTech(IT)
Year: 4th **Semester:** 7th
Examination: End Semester Examination
Examination year: December - 2021

Course Code: IT411

Course Name: Data Analysis on Cloud Platform

Date: 31/12/2021

Total Marks: 40

Time: 11:30 am to 01:30 pm

Total Pages: 02

Instructions:

- Write each answer on a new page.
- Use of a simple calculator is permitted.
- Draw all relevant waveforms in answer sheet only.
- * COs=Course Outcome mapping. # BTL=Bloom's Taxonomy Level mapping

Q. No.	Details	Marks	COs*	BTL#
Q.1	Select the right option(Write right answer in answer-sheet only)	[05]		
a)	_____ is a component on top of Spark Core. A : Spark Streaming B : Spark SQL C : RDDs D : All of the mentioned	[01]	CO2	BT1
b)	_____ leverages Spark Core fast scheduling capability to perform streaming analytics. A : MLlib B : Spark Streaming C : GraphX D : RDDs	[01]	CO2	BT1
c)	Given a dataframe df, select the code that returns its number of rows: A : df.take('all') B : df.collect() C : df.count() D : df.numRows()	[01]	CO3	BT1
d)	Which of the following language is not supported by Spark? A : Java B : Pascal C : Scala D : Python	[01]	CO3	BT1
e)	Spark is packaged with higher level libraries, including support for _____ queries. A : SQL B : C C : C++ D : None of the mentioned	[01]	CO3	BT1

Q.2 Do as directed

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|----|--|-------------|-----|-----|
| a) | What do you mean by Data Mining and Cloud Computing? Briefly describe atleast 5 differences between Amazon AWS, Google Cloud, and Microsoft Azure? | [08] | C01 | BT1 |
| b) | What are the steps to create an account for Google Cloud Platform (GCP)? | [05] | C02 | BT1 |
| c) | What is PySpark? Is Spark quicker than MapReduce? | [05] | C03 | BT3 |
| d) | What is a partition in ApacheSpark? Tell us how will you implement SQL in Spark? | [05] | C03 | BT2 |
| e) | Can you use Spark to access and analyze data stored in Cassandra databases? How can you minimize data transfers when working with Spark? | [07] | C04 | BT3 |
| f) | What are the steps to create GCS bucket and delete a bucket with example? | [05] | C03 | BT3 |
| g) | What do you mean by Data Mining and Cloud Computing? Briefly describe atleast 5 differences between Amazon AWS, Google Cloud, and Microsoft Azure? | [08] | C01 | BT2 |

*****End of Question Paper*****