



**NAVVRACHANA  
UNIVERSITY**  
a UGC recognized University

**School:** School of Engineering and Technology  
**Program/s:** BTech(IT)  
**Year:** 3<sup>rd</sup> **Semester:** 5<sup>th</sup>  
**Examination:** End Semester Examination  
**Examination year:** December - 2021

**Course Code:** IT320 **Course Name:** Python for ML and Data Science  
**Date:** 10/12/2021  
**Time:** 08:30 am to 10:30 am

**Total Marks:** 40  
**Total Pages:** 01

**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#
<b>Q.1</b>	<b>Attempt any five</b>	<b>[10]</b>		
A.	What do you mean by delimiter in the context of reading from the file?	[02]	CO2	BT3
B.	Write any small python script for detecting and filtering outliers.	[02]	CO2	BT3
C.	Explain hierarchical indexing in brief.	[02]	CO3	BT2
D.	Explain combining & merging dataset.	[02]	CO3	BT1
E.	With a proper diagram explain ticks, labels, and legends.	[02]	CO3	BT1
F.	What do you mean by a marker in graph?	[02]	CO4	BT3
<b>Q.2</b>	<b>Attempt any two</b>	<b>[10]</b>		
A.	Write a short note on reading & writing data in file.	[05]	CO2	BT1
B.	Write a short note on handling missing data from a large dataset.	[05]	CO3	BT1
C.	What do you mean by subplot? Explain different ways to do sub-plotting? Write a small script to do sub-plotting?	[05]	CO3	BT1
<b>Q.3</b>	<b>Attempt any two</b>	<b>[20]</b>		
A.	List and explain different data preprocessing activities. Also explain python functions related to these activities.	[10]	CO2	BT3
B.	Write a short note on sklearn library.	[10]	CO3	BT2
C.	Write a short note on matplotlib library.	[10]	CO4	BT1

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