



GIET UNIVERSITY, GUNUPUR – 765022

Ph.D. (Second Semester) Examinations, November – 2023

WPPECS2014 - Data Visualization

(CSE)

Time: 3 hrs

Maximum: 70 Marks

The figures in the right hand margin indicate marks.

Answer ANY FIVE Questions

(14 x 5 = 70 Marks)

	Marks
1.a. Demonstrate the types of Visual Perceptual Skills.	7
b. Explain briefly the Gestalt principles.	7
2.a. Explain the key principles of Data Visualization.	7
b. Discuss the applications of visual analytics.	7
3.a. Explore the Art of Effective Visualization of Multi-dimensional Data.	7
b. Discuss the challenges of visualizing high-dimensional data and propose strategies to address them.	7
4.a. What techniques can we use for interactive data visualization?	7
b. How can one dimensional multivariate data be visualized?	7
5.a. Explore the challenges of collaborative visualizations, Evaluating visualizations.	7
b. Describe the process of evaluating the effectiveness of a data visualization. What metrics can be used for this purpose?	7
6.a. Explain visual of perception and explore the importance with its application.	7
b. What are the 3 methods of data representation? Discuss each of them in detail.	7
7 a. Explain different types of 3D Visualization techniques for Volumetric Data.	7
b. Examine the role of colour in data visualization. How can it enhance or detract from the effectiveness of a visualization?	7
8 a. Differentiate visualization of text and text documents with relevant examples.	7
b. Exemplify different data structure used in Data visualization.	7

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