**Code No:20CS6621**

**PVP20**

**PVP Siddhartha Institute OF TECHNOLOGY**

**(Autonomous)**

 **DATA VISULAIZATION**

**MODEL QUESTION PAPER**

**Duration: 3 Hours Max. Marks: 70**

Note:

1. Contains 5 essay questions with an internal choice. Each question carries 14 Marks.
2. All parts of Question paper must be answered in one place.

 5 x 14 = 70 Marks

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  | Blooms Level | CO | Max. Marks |
| **UNIT-I** |
| 1 | (a) | Illustrate the schematic diagram of the visualization process. | L2 | CO1 | 7 |
| (b) | Explain the forms of data- data values and data structures | L2 | CO1 | 7 |
| **OR** |
| 2 |  | Develop a model with different stages of perceptual processing | L2 | CO1 | 14 |
| **UNIT-II** |
| 3 | (a) | Describe the Functional view on the visualization pipeline. | L3 | CO1 | 7 |
| (b) | How the challenges of visualization are utilized to design an effective color map ? | L3 | CO2 | 7 |
| **OR** |
| 4 | (a) | Describe visual dataflow programming | L2 | CO1 | 7 |
| (b) | Analyze color maps that are used for visualizing the objects | L4 | CO3 | 7 |
| **UNIT-III** |
| 5 | (a) | Which technique is used for visualizing vector fields and its variations | L2 | CO1 | 7 |
|  | (b) | Which methods are used to construct the objects from scattered points ? | L3 | CO2 | 7 |
| **OR** |
| 6 | (a) | Discuss about vector glyphs in 2D  | L2 | CO1 | 7 |
|  | (b) | How to make use of cutting method as a domain modeling technique | L3 | CO2 | 7 |
| **UNIT-IV** |
| 7 | (a) | Construct dataset from a given image? | L3 | CO2 | 7 |
| (b) | How mean shift advanced segmentation techniques helps in Shape analysis | L3 | CO3 | 7 |
| **OR** |
| 8 | (a) | How basic segmentation is related to shape analysis of objects | L3 | CO1 | 7 |
| (b) | Analyze the various cutting techniques for segmentation in shape analysis | L4 | CO3 | 7 |
| **UNIT-V** |
| 9 | (a) | Apply the methods to the users in understanding all that abstract data? | L3 | CO4 | 7 |
| (b) | Describe the techniques in tree visualization | L2 | CO1 | 7 |
| **OR** |
| 10 | (a) | Make use of different techniques for table visualization of stock exchange data | L2 | CO2 | 7 |
| (b) | How dimensionality reduction is performed on multivariate data | L2 | CO4 | 7 |

Course Coordinator Head of the Department