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| **Velagapudi Ramakrishna Siddhartha Engineering College::Vijayawada**  **(Autonomous)**  III /IV B Tech Degree Examinations(June 2019)  Sixth Semester  **Department of Information Technology**  **17IT2605:Data Visualization** | | | | | | |
| Time:3Hrs | | | **MODEL QUESTION PAPER** | | Max Marks:70 | |
| Part – A is Compulsory  Answer one (01) question from each unit of Part – B  Answers to any single question or its part shall be written at one place only | | | | | | |
| ***Cognitive Levels(K): K1-Remember;K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create*** | | | | | | |
| **Q. No** | | **Question** | | **Marks** | **Course Outcome** | **Cog. Level** |
| **Part - A** | | | | **10X1=10M** | | |
| 1 | a | Define data visualization | | 1 | CO1 | K2 |
|  | b | What are key factors surrounding a visualization project | | 1 | CO1 | K1 |
|  | c | List " eight hats" of data visualization design | | 1 | CO1 | K1 |
|  | d | How to choose the correct visualization method | | 1 | CO2 | K2 |
|  | e | What is meant by the visualization anatomy | | 1 | CO2 | K2 |
|  | f | How to give annotation and arrangement in data visualization | | 1 | CO2 | K2 |
|  | g | Differentiate Dimension and Measure | | 1 | CO3 | K2 |
|  | h | Define data aggregation | | 1 | CO3 | K2 |
|  | I | Give Date Hierarchies in Tableau | | 1 | C04 | K3 |
|  | j | What is encoding | | 1 | C04 | K2 |
| **Part - B** | | | | **4X15 =60M** | | |
| **UNIT - I** | | | | | | |
| 2 | a | Explain the context of the digital era and the role of data visualization as a tool in capturing huge data? | | 7 | CO1 | K2 |
|  | b | What are key elements for data visualization definition and explain design methodology? | | 8 | CO1 | K2 |
| **(OR)** | | | | | | |
| 3 | a | Describe significant difference in design choices depending on visualization’s function? | | 8 | CO1 | K2 |
|  | b | Write about personal capabilities required for a visualization using eight hats of data visualization design? | | 7 | CO1 | K2 |
| **UNIT - II** | | | | | | |
| 4 | a | Discuss in detail about the visualization anatomy of data representation. | | 15 | CO2 | K3 |
|  |  |  | |  |  |  |
| **(OR)** | | | | | | |
| 5 | a | Explain comprehensive range of visualization chart types across a taxonomy of different methods. | | 15 | CO2 | K3 |
|  |  |  | |  |  |  |
| **UNIT - III** | | | | | | |
| 6 | a | Write about constructing and evaluating design solution. | | 5 | CO3 | K4 |
|  | b | Describe charting productivity tools for powerful visualization capabilities. | | 10 | CO3 | K4 |
| **(OR)** | | | | | | |
| 7 | a | Explain about the role of programming languages and tools in design process. | | 7 | CO3 | K4 |
|  | b | Write in brief about final stage of construction process and post-launch of visualization. | | 8 | CO3 | K4 |
| **UNIT - IV** | | | | | | |
| 8 | a | Explicate the process of connecting to data in Tableau. | | 7 | CO4 | K2 |
|  | b | What are five ways to create a bar chart in Tableau? | | 8 | CO4 | K2 |
| **(OR)** | | | | | | |
| 9 | a | Write about Line Graphs, Independent Axes, and Date Hierarchies with examples. | | 7 | CO4 | K2 |
|  | b | Describe level of detail, encoding and mark cards for data representation. | | 8 | CO4 | K2 |

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| **Designation** | **Name in Capitals** | **Signature with Date** |
| **Course Coordinator** |  |  |
| **Program Coordinator** |  |  |
| **Head of the Department** |  |  |

**VELAGAPUDI RAMAKRISHNA**

**SIDDHARTHA ENGINEERING COLLEGE::VIJAYAWADA**

**(AUTONOMOUS)**

Dt.12-06-2019

**GUIDELINES FOR FRAMING MODEL QUESTION PAPER**

The model papers for all subjects in a semester are gathered from the departments whenever a course is offered for the first time adopting new regulation. All the Heads of the Departments are requested to direct their faculty to strictly adhere to the following guidelines while framing the model question papers for the subjects of UG and PG courses in the new curriculum.

1. Questions must be covered unit-wise uniformly as per the syllabus without missing the competency.
2. The question paper shall reflect the ***Bloom’s Cognitive Levels of Learning***.

**Cognitive Levels (K): K1-Remember; K2-Understand; K3-Apply; K4-Analyze; K5-Evaluate; K6-Create**

* The composition of question paper shall have questions at different complexity levels as listed below:
* Questions that can be attempted by an average student (K1 & K2) 40%
* Questions of intermediate complexity (K3 & K4) 40-50%
* Questions of design and application oriented nature (K5 & K6) 10-20%

1. Question paper is to be set conforming to the OBE pattern clearly mentioning the Course Outcomes and Bloom’s Cognitive Levels against each question.
2. The questions are to be set with minimum 2 sub-questions (a) & (b) for each main question to the extent possible covering entire syllabus in the unit.
3. Specify the marks against each question / part of a question in Part B.
4. The figures, if any, may be computer aided or neatly drawn with black pen indicating clearly the values/dimensions.
5. Prepare the one mark questions in only sentence form. Answers to these questions must be unique and having short answers limited to three/four lines.

**PRINCIPAL**